Completion Instructions

Return of Capital Adequacy Ratio
Part IIId – Risk-weighted Amount for Credit Risk
(Securitization Exposures)
Form MA(BS)3(IIId)

Introduction

1. This Form collects information on ***securitization exposures*** of authorized institutions incorporated in Hong Kong with different Divisions to cater for reporting under the ***standardized (securitization) approach (STC(S) approach)*** or ***the internal ratings-based (securitization) approach (IRB(S) approach)***.

2. This Form contains the following five main Divisions:

Division I: Summary of Risk-weighted Amount and Capital Deductions

Division II: Securitization Exposures under STC(S) Approach

(i) Division IIA: Securitization Exposures under STC(S) Approach (excluding exposures reported in Divisions IIB, IIC & V)

(ii) Division IIB: ***Re-securitization Exposures*** under STC(S) Approach (excluding exposures reported in Divisions IIC & V)

(iii) Division IIC: ***Liquidity Facilities*** and ***Servicer Cash Advance Facilities*** under STC(S) Approach

Division III: Securitization Exposures under IRB(S) Approach

(i) Division IIIA: ***Rated*** Securitization Exposures calculated by Ratings-based Method under IRB(S) Approach (excluding exposures reported in Divisions IIIB & V)

(ii) Division IIIB: ***Rated*** Re-securitization Exposures calculated by Ratings-based Method under IRB(S) Approach (excluding exposures reported in Division V)

(iii) Division IIIC: ***Unrated*** Securitization Exposures calculated by Supervisory Formula Method or the method specified in section 277(3) of the Rules ("fallback option") under IRB(S) Approach (excluding exposures reported in Division V)

Division IV: Memorandum Items on Liquidity Facilities and Servicer Cash Advance Facilities under STC(S) Approach and IRB(S) Approach

Division V: ***Investors' Interest*** for Securitization Exposures of Originating AIs subject to ***Early Amortization Provision*** under STC(S) Approach and IRB(S) Approach

3. The completion instructions contain six sections. Section A provides definitions and clarification of certain items. Sections B, C, D, E and F explain the specific reporting requirements for individual Divisions of the return.

4. This Form and completion instructions should be read in conjunction with Part 7 of the Banking (Capital) Rules (BCR).

Section A: Definitions and Clarification

5. Scope of reporting:

   (a) Form MA(BS)3(IIId) applies to securitization exposures[1] in the ***banking book*** only. Securitization exposures include re-securitization exposures unless otherwise stated.

   (b) For ***securitization transactions*** that meet the operational requirements specified in Schedule 9 or 10 to the BCR, as the case requires, the ***originating institution*** of the transactions may, with the ***prior consent*** of the Monetary Authority (MA),

      (i) in the case of ***traditional securitization transactions***, exclude the ***underlying exposures*** of the transactions from the calculation of risk-weighted amount (RWA); and

      (ii) in the case of ***synthetic securitization transactions***, calculate the RWA of the underlying exposures of the transactions according to the requirements set out in section 243 or 255 of the BCR based on the approach used by the institution to calculate its credit risk for the class of exposures into which the underlying exposures would fall if they were not securitized, and report them in Form MA(BS)3(IIIa), Form MA(BS)3(IIIb), Form MA(BS)3(IIIc) and Form MA(BS)3(IIId) as appropriate.

6. Reporting institutions are required to complete those Divisions of the Form that are relevant to the approach they use as follows:

   (a) Reporting institutions using only the STC(S) Approach: Divisions I, IIA, IIB, IIC, IV and V

   (b) Reporting institutions using only the IRB(S) Approach: Divisions I, IIIA, IIIB and IIIC, IV and V

   (c) Reporting institutions using a combination of the STC(S) approach and the IRB(S) approach: all Divisions

[1] Transactions under which exposures are securitized in one single ***tranche*** do not fall within the securitization framework.

Reporting institutions should refer to sections 15 and 16 of the BCR to determine which approach to use for their securitization exposures.

7. "***Principal Amount***"

   (a) in the case of the STC(S) approach, should be reported net of ***specific provisions*** or partial write-offs;

   (b) in the case of the IRB(S) approach, should be reported gross of specific provisions or partial write-offs.

8. "Principal Amount after CRM" means the reported principal amount adjusted for the credit risk mitigating effect of ***recognized credit risk mitigation*** (CRM). The latter refers to techniques which may be used by a reporting institution to mitigate credit risk, and hence reduce the capital requirement of an exposure. *CRM in this context refers to the use of CRM to hedge the credit risk of a securitization exposure rather than the underlying exposures of the securitization transaction concerned.*

9. Where a securitization exposure is not covered by recognized CRM, the amounts reported in the columns of "Principal Amount" and "Principal Amount after CRM" will be the same.

10. Where the securitization exposure of a reporting institution is covered fully or partially by recognized CRM and the institution calculates the CRM effect by using the simple approach (in the case of collateral) or through substitution of risk-weights (in the case of ***guarantee*** or ***credit derivative contract***), the principal amount of the exposure before adjusting for the CRM effect will be reported in the column of "Principal Amount" of the row for the risk-weight applicable to the exposure, and the principal amount of the uncovered portion will be reported in the column of "Principal Amount after CRM" of the same row. The principal amount of the covered portion, which is subject to a lower risk-weight, will be reported in the column of "Principal Amount after CRM" of the row for the risk-weight applicable to the covered portion.

11. Where the securitization exposure of a reporting institution is covered fully or partially by recognized CRM and the institution calculates the CRM effect by using the comprehensive approach (in the case of collateral), the principal amount of the exposure before adjusting for the CRM effect will be reported in the column of "Principal Amount" of the row for the risk-weight applicable to the exposure, and the principal amount of the exposure after adjusting for the CRM effect will be reported in the column of "Principal Amount after CRM" of the same row.

12. If a reporting institution is not the originating institution of a securitization transaction but provides ***credit protection*** (regardless of whether such protection constitutes recognized CRM or not) to a securitization exposure arising from the transaction, it should calculate the RWA in respect of the covered portion of the exposure as if it were an ***investor*** in the exposure. If it provides credit protection to an unrated ***credit enhancement***, it should treat the credit protection provided as if it were directly providing the unrated credit enhancement.

13. Credit enhancements provided by a reporting institution include all arrangements that could result in the institution absorbing losses incurred by a ***special purpose entity*** (SPE), investors, or any providers of liquidity facilities or servicer cash advance facilities in respect of a securitization transaction. A credit enhancement facility can be in the form of a first loss facility or a second loss facility.

14. For capital adequacy purposes, a liquidity facility or servicer cash advance facility in respect of a securitization transaction is treated as credit enhancement if it is provided in the absence of any other credit enhancement from an independent third party to cover losses arising from the non-performing underlying exposures of the transaction.

15. "Risk-weight"

    (a) For the purposes of determining the risk-weight to be applied to a rated securitization exposure, the reporting institution should map the ***ECAI issue specific rating*** of the exposure to a scale of ***credit quality grades*** which –

        (i) under the STC(S) approach, is represented by the numerals 1 to 5 for ***long-term ECAI issue specific ratings*** and by the numerals 1 to 4 for ***short-term ECAI issue specific ratings*** as set out in Schedule 11 to the BCR (see **Annex IIId-A** for quick reference),

        (ii) under the IRB(S) approach, is represented by the numerals 1 to 12 for long-term ECAI issue specific ratings and by the numerals 1 to 4 for short-term ECAI issue specific ratings as set out in Schedule 14 to the BCR (see **Annex IIId-C** for quick reference).

    (b) For the purposes of determining the risk-weight to be applied to an unrated securitization exposure, the reporting institution should apply the method set out in the specific instructions for Divisions II, III and V of the Form under sections C, D and F of these instructions respectively.

16. "Credit conversion factor"

    For an off-balance sheet securitization exposure (other than an ***interest rate contract*** or ***exchange rate contract***), a ***credit conversion factor*** (CCF) is applied to the principal amount after CRM to arrive at the ***credit equivalent amount*** (CEA) of the exposure. The CCF is 100% for rated securitization exposures, and is also 100% for unrated securitization exposures except for certain types of liquidity facilities and investors' interest. The CCFs for liquidity facilities under the STC(S) approach are set out in section 240 of the BCR (see also Division IIC of the Form) while those under the IRB(S) approach are set out in sections 252, 264 and 277. The CCFs for investors' interest are set out in Schedules 12 and 13 to the BCR (see also Division V of the Form).

17. "Risk-weighted amount"

For an on-balance sheet securitization exposure, the RWA is the product of the principal amount after CRM of the exposure and its relevant risk-weight. For an off-balance sheet securitization exposure, the RWA is the product of the CEA (obtained by multiplying the principal amount after CRM of the exposure by an appropriate CCF) of the exposure and its relevant risk-weight.

18. "Maturity mismatch"

For a reporting institution using the STC(S) approach or the IRB(S) approach, where there is a maturity mismatch between a securitization exposure that it holds and the credit protection covering the exposure, the value of the credit protection should be adjusted in accordance with Section C.4 of the completion instructions for MA(BS)3(IIIb).

19. "Interest rate contracts and exchange rate contracts"

If a reporting institution enters into an interest rate contract or an exchange rate contract in a securitization transaction, the RWA of the securitization exposure arising from such contract should be calculated in the same way as the ***counterparty credit risk*** arising from ***OTC derivative transactions***. The RWA so calculated should be reported in

(a) Division B of Form MA(BS)3(IIIa) and Form MA(BS)3(IIIf), or Form MA(BS)3(IIIe), where appropriate, if the institution is using the ***basic approach*** (***BSC approach***);

(b) Division B of Form MA(BS)3(IIIb) and Form MA(BS)3(IIIf), or Form MA(BS)3(IIIe), where appropriate, if the institution is using the ***standardized (credit risk) approach*** (***STC approach***); or

(c) Form MA(BS)3(IIIc) and Form MA(BS)3(IIIf), or Form MA(BS)3(IIIe), where appropriate, if the institution is using the ***internal ratings-based approach*** (***IRB approach***).

20. Overlapping exposures

(a) If a reporting institution provides overlapping facilities as defined in section 241(1) of the BCR in the case of the STC(S) approach or section 253(1) of the BCR in the case of the IRB(S) approach to a securitization transaction and the facilities are subject to different CCFs, the CCF applicable to the undrawn portion of the overlapping portion will be the highest CCF among those different CCFs. If the overlapping facilities are provided by different reporting institutions, each institution should provide regulatory capital for the maximum amount of the facility provided by it (See sections 241(1) and (2) or 253(1) and (2) of the BCR).

(b) A reporting institution can recognise overlap in its securitization exposures that falls within the situation described in section 241(3) or 253(3) of the BCR. For example, a bank providing a liquidity facility supporting 100% of the asset-backed commercial papers (ABCPs) issued by an ***ABCP programme*** and purchasing 20% of the outstanding ABCPs of that programme can recognize an overlap of 20% (100% liquidity facility + 20% ABCPs held – 100% ABCPs issued = 20%). If a bank provides a liquidity facility that covers 50% of the outstanding ABCPs and purchases 20% of the ABCPs, there is no overlap between the two exposures. The institution may calculate the risk-weighted amount of the overlapping portion by attributing the overlapping portion to the exposure (i.e. either the facility or ABCPs held) that will result in a higher capital requirement for the overlapping portion. See **Annex IIId-B1** for numerical illustrations and sections 241(3) to (6) or 253(3) to (6) of the BCR for the detailed rules.

(c) Overlaps between banking book securitization exposures and trading book securitization exposures can be recognised only if the reporting institution is able to calculate and compare the capital charges (in the case of trading book exposures, means specific risk capital charges) for the relevant exposures. See **Annex IIId-B2** for numerical illustrations. If the overlapping portion is attributed to a trading book securitization exposure, that portion should be reported in Form MA(BS)3(IV) for market risk instead of in this Form.

Section B: Specific Instructions for Division I of the Form

21. The following explains the relevant principles for reporting securitization exposures under Division I.

Division I	**Summary of Risk-weighted Amount and Capital Deductions**
Item	Nature of item
A	**Risk-weighted amount**
Col.(1)	This column captures the total RWAs of the securitization exposures of the reporting institution and adjustments to the RWAs due to maximum capital requirement.
Col.(2)	The RWA of securitization exposures reported under each item in column (1) arising from securitization transactions in which the reporting institution is the originating institution has to be shown separately in the column of "Amount incurred as an originating institution".
1(a) & 2(a)	**Rated securitization exposures**
	Item *1(a)* captures the total RWA of rated securitization exposures calculated under the STC(S) approach in column (10) of item *1(k)* in Division IIA and column (10) of item *1(l)* in Division IIB.

Item *2(a)* captures the total RWA of rated securitization exposures calculated under the IRB(S) approach in both columns (12) of item *5* in Divisions IIIA and IIIB.

1(b) & 2(b) **Unrated securitization exposures**

Item *1(b)* captures the sum of the total RWAs of unrated securitization exposures calculated under the STC(S) approach in column (10) of item *2(d)* in Division IIA, column (10) of item *2(d)* in Division IIB and the total of column (5) of items *1*, *2*, *3* and *4* in Division IIC.

Item *2(b)* captures the sum of the total RWAs of unrated securitization exposures calculated under the IRB(S) approach in column (9) of item *4* in Division IIIC.

1(c) & 2(c) **Investors' interest**

Report here the total adjusted RWA of investors' interest calculated in column (11) of item *3* in Division V. Reporting institutions using the STC(S) approach to calculate the RWA of investors' interest should report the amount in item *1(c)*, or in item *2(c)* if the IRB(S) approach is used. As items *1(c)* and *2(c)* are only applicable to originating institutions, the amounts reported in columns (1) and (2) of these two items should be the same.

1(e) & 2(e) **Adjustments due to maximum capital requirement**

For each securitization transaction in which the reporting institution is the ***originator***, the institution has to determine the maximum capital requirement for all its securitization exposures under the transaction as follows:

- If the transaction is not subject to an early amortization provision, or the transaction has an early amortization provision but under section 244(3) or section 256(3) of the BCR the institution is not required to provide ***regulatory capital*** for the investors' interest in respect of the early amortization provision, the maximum capital requirement will be the regulatory capital that the institution would have been required to provide for the underlying exposures of the transaction if the underlying exposures had not been securitized through the transaction.

- If the transaction is subject to an early amortization provision and the institution is required to provide regulatory capital for the investors' interest in respect of the early amortization provision, the transaction will not be subject to a maximum capital requirement.

For a securitization transaction which is subject to a maximum capital requirement, the institution is not required to provide regulatory capital for all securitization exposures held by the institution in the transaction in excess of the maximum capital requirement for that transaction.

When the regulatory capital calculated for the securitization exposures held by the institution in the transaction exceeds the maximum capital requirement, the amount of excess will be the amount of adjustment which should be made to the RWA, and where applicable, made to the amount of capital deduction. The amount of adjustment to the RWA should be reported in this item.

1(f) & 2(f) **Adjusted total**

The amount reported in item *1(e)* is subtracted from the amount reported in item *1(d)* to arrive at the adjusted total RWA of the securitization exposures reported in item *1(f)*. Similarly, item *2(f)* is the difference between items *2(d)* and *2(e)*.

2(g) **Adjusted total multiplied by scaling factor 1.06**

This amount is arrived at by multiplying the RWA reported in item 2(f) by a scaling factor of 1.06 which is specified in section 224 of the BCR.

B Capital deductions

Col (1) This column captures securitization exposures that are required to be deducted from a reporting institution's ***CET1 capital***. The amount of deduction is reported net of any ***valuation adjustment*** and specific provisions (in the case of the IRB(S) approach) and net of any specific provisions (in the case of the STC(S) approach) made against the exposures.

When adjustment to the amount of capital deduction is required due to maximum capital requirement, report here the adjusted amount of capital deduction.

Col.(2) The amount of capital deduction pertaining to securitization exposures reported under each item in column (1) arising from securitization transactions in which the reporting institution is the originating institution has to be shown separately in the column of "Amount incurred as an originating institution".

1 **Gain-on-sale**

Report here the total amount of ***gain-on-sale*** arising from securitization transactions (including the portion arising from ***credit-enhancing interest-only strips***) where the reporting institution is the originating institutions in respect of the securitization transactions. As this item is only applicable to originating institutions, the amount reported in columns (1) and (2) of this item should be the same (See section 236A(1) of the BCR under the STC(S) approach or section 251A(1) of the BCR under the IRB(S) approach).

2 **Other exposures as specified by the Monetary Authority**

This item captures any other securitization exposures specified by the MA in a notice in writing given to the reporting institution under section 236A(2) of the BCR under the STC(S) approach or section 251A(2) of the BCR under the IRB(S) approach.

Section C: Specific Instructions for STC(S) Approach

C.1 Determination of Risk-weights and Credit Conversion Factors

22. Securitization exposures have to be divided into those with ECAI issue specific ratings (i.e. rated) and those without (i.e. unrated).

    (a) Subject to subparagraphs (b), (c) and (d) below, rated securitization exposures should be reported in item *1* of Division IIA or item *1* of Division IIB of the Form while unrated securitization exposures should be reported in item *2* of Division IIA, item *2* of Division IIB or Division IIC of the Form, as the case requires.

    (b) If credit protection is provided directly to the SPE of a securitization transaction by a ***credit protection provider*** which does not fall within section 98 or 99 of the BCR, a rated securitization exposure under the transaction covered by the credit protection should be treated as unrated.

    (c) If credit protection is not obtained by the SPE but is applied to a rated securitization exposure held by the reporting institution, the institution should treat the exposure as unrated and use the CRM treatment stated in Section C.2 below to take into account the effect of the credit protection.

    (d) If the ECAI issue specific rating of a rated securitization exposure held by the reporting institution is at least partly based on unfunded support (e.g. liquidity facilities) provided by the institution (i.e. self-guarantee), the institution should treat the exposure as unrated securitization exposure for the purposes of capital requirement calculation.

    (e) In the case of unrated securitization exposures in the form of liquidity facilities or servicer cash advance facilities, regardless of whether they satisfy the criteria set out in section 240(1) (or section 240(6) in the case of servicer cash advance facilities) of the BCR, the *undrawn portion* of these facilities should be reported in Division IIC instead of Divisions IIA and IIB of the Form.

23. The risk-weight of a rated securitization exposure is determined based on the ECAI issue specific rating assigned to the exposure by an ***external credit assessment***

institution (ECAI). Schedule 11 to the BCR sets out how different sets of notations used by different ECAIs are mapped to the credit quality grades (See **Annex IIId-A** for quick reference).

24. Reporting institutions should follow a number of general principles when selecting and using ECAI issue specific ratings for risk-weighting securitization exposures. These principles are set out in sections 231 and 232 of the BCR (See **Annex IIId-B** for quick reference).

25. The following explains how securitization exposures under each item are risk-weighted and, where applicable, the relevant principles for reporting exposures under each item.

Division IIA Securitization Exposures under STC(S) Approach (excluding exposures reported in Divisions IIB, IIC & V)

Item	Nature of item
1(a) to 1(k)	**Rated securitization exposures**

Included in item *1* are securitization exposures with ECAI issue specific ratings (i.e. rated) with the exception of the following items –

(a) rated re-securitization exposures (which should be reported in Division IIB item *1*);

(b) the undrawn portion of rated eligible servicer cash advance facilities that are subject to a CCF of 0% (which should be reported in Division IIC item *4*); and

(c) exposures arising from investors' interest (which should be reported in Division V).

The ECAI issue specific rating of a securitization exposure should be used to determine the risk-weight of the exposure based on Table 1 if it is a long-term ECAI issue specific rating, or based on Table 2 if it is a short-term ECAI issue specific rating (See also sections 237(2) and (3) of the BCR).

Table 1

Long-Term Credit Quality Grade (LTCQG)	1	2	3	4	5
Risk-weight (originating institutions)	20%	50%	100%	1250%	1250%
Risk-weight (investing institutions)	20%	50%	100%	350%	1250%

Table 2

Short-Term Credit Quality Grade (STCQG)	1	2	3	4
Risk-weight (both originating and investing institutions)	20%	50%	100%	1250%

Rated securitization exposures that are subject to a risk-weight of 1250% also include:

(a) credit-enhancing interest-only strips (after deduction of any amount that has been deducted from the CET1 capital as gain-on-sale), if rated; and

(b) rated securitization exposures that do not meet any of the requirements set out in section 230A of the BCR.

2 **Unrated securitization exposures**

Included in item *2* are securitization exposures without ECAI issue specific ratings (i.e. unrated) with the exception of the following items -

(a) unrated re-securitization exposures (which should be reported in Division IIB item *2*);

(b) the undrawn portion of unrated liquidity facilities or unrated servicer cash advance facilities (which should be reported in Division IIC); and

(c) investors' interest in securitization transactions (which should be reported in Division V).

2(a)(i) to (vi) **Most senior securitization exposures / drawn portion of liquidity facilities or servicer cash advance facilities**

<u>*Most senior securitization exposures*</u>

If the reporting institution knows the current composition of the pool of underlying exposures of a securitization transaction, an unrated securitization exposure that is the most senior in that transaction can be allocated a risk-weight equal to the ***weighted average risk-weight*** of the underlying exposures. The risk-weights of the underlying exposures are determined according to the approach (i.e. BSC approach or STC approach) used by the reporting institution to calculate the credit risk for the class of exposures into which the underlying exposures would fall if they were held by the institution. If the reporting institution is unable to determine the risk-weights to be allocated because it does not know the current composition of the pool of underlying exposures of the securitization transaction, the institution should allocate a risk-weight of 1250% to the securitization exposure and report the exposure in item *2(a)(vi)*. Item *2(a)(vi)* also captures most senior securitization exposures that do not meet any of the requirements set out in section 230A of the BCR.

When determining whether an exposure is the most senior, the reporting institution should make reference to section 238 of the BCR.

<u>*Drawn portion of liquidity facilities or servicer cash advance facilities*</u>

The drawn portion of an unrated liquidity or servicer cash advance facility should be reported under this item. The risk-weight to be assigned to the drawn portion of an unrated ***eligible*** liquidity or servicer cash advance facility is the highest risk-weight that would be assigned to any of the underlying exposures covered by the facility under the approach (i.e. BSC approach or STC approach) used by the reporting institution to calculate its credit risk for the class of exposures into which the underlying exposures would fall if they were held by the institution (See also section 240(5) of the BCR). The risk-weight to be assigned to the drawn portion of an unrated ***non-eligible*** liquidity or servicer cash facility should be 1250%. Item *2(a)(vi)* also captures drawn portion of liquidity or servicer cash advance facilities (whether eligible or non-eligible) that do not meet any of the requirements set out in section 230A of the BCR.

2(b)(i) to (ix) **Exposures in a second loss position or better in asset-backed commercial paper programmes**

For securitization exposures which satisfy the criteria set out in section 239 of the BCR, the risk-weight to be allocated to the exposures should be the greater of -

(a) 100%; or

(b) the highest risk-weight that would be assigned to any of the underlying exposures under the approach (i.e. the BSC approach or STC approach) used by the reporting institution to calculate the credit risk for the class of exposures into which the underlying exposures would fall if they were held by the institution.

If an securitization exposure that falls within section 239 of the BCR does not meet any of the requirements set out in section 230A of the BCR, the reporting institution should allocate a risk-weight of 1250% to the exposure and report the exposure in item *2(b)(ix)*.

2(c) **Other unrated securitization exposures**

All unrated securitization exposures other than those mentioned above should be reported in this item. Also, included in this item unrated credit-enhancing interest-only strips (after deduction of any amount that has been deducted from the CET1 capital as gain-on-sale).

3 If the exposures reported in item *1* or *2* contain liquidity facilities or servicer cash advance facilities, report the total amount of such facilities reported in item *1* and *2* in this item.

Division IIB **Re-securitization Exposures under STC(S) Approach (excluding exposures reported in Divisions IIC & V)**

1(a) to 1(l) **Rated re-securitization exposures**

Included in item *1* are re-securitization exposures with ECAI issue specific ratings (i.e. rated) with the exception of the following items –

(a) the undrawn portion of rated eligible servicer cash advance facilities that are subject to a CCF of 0% (which should be reported in Division IIC item *4*); and

(b) exposures arising from investors' interest, if applicable (which should be reported in Division V).

The ECAI issue specific rating of a re-securitization exposure should be used to determine the risk-weight of the exposure based on Table 3 if it is a long-term ECAI issue specific rating, or based on Table 4 if it is a short-term ECAI issue specific rating (See also sections 237(4) and (5) of the BCR).

Table 3

Long-Term Credit Quality Grade (LTCQG)	1	2	3	4	5
Risk-weight (originating institutions)	40%	100%	225%	1250%	1250%
Risk-weight (investing institutions)	40%	100%	225%	650%	1250%

Table 4

Short-Term Credit Quality Grade (STCQG)	1	2	3	4
Risk-weight (both originating and investing institutions)	40%	100%	225%	1250%

Rated re-securitization exposures that are subject to a risk-weight of 1250% also include:

(a) credit-enhancing interest-only strips (after deduction of any amount that has been deducted from the CET1 capital as gain-on-sale), if rated; and

(b) rated re-securitization exposures that do not meet any of the requirements set out in section 230A of the BCR.

2 **Unrated re-securitization exposures**

Included in item *2* are re-securitization exposures without ECAI issue specific ratings (i.e. unrated) with the exception of the following items -

(a) the undrawn portion of the unrated liquidity facilities or unrated servicer cash advance facilities (which should be reported in Division IIC); and

(b) investors' interest, if applicable, in re-securitization transactions (which should be reported in Division V).

2(a)(i) to (ix) **Most senior re-securitization exposures / drawn portion of liquidity facilities or servicer cash advance facilities**

<u>Most senior re-securitization exposures</u>

The reporting method is the same as that of Division IIA item *2(a)* except that the approaches that would be used to determine the weighted average risk-weights of the underlying exposures could include the STC(S) approach.

<u>Drawn portion of liquidity facilities or servicer cash advance facilities</u>

The reporting method is the same as that of Division IIA item *2(a)* except that the approaches that would be used to determine the highest risk-weight could include the STC(S) approach.

2(b)(i) to (xii) **Exposures in a second loss position or better in asset-backed commercial paper programmes**

The reporting method is the same as that of Division IIA item *2(b)* except that the approaches that would be used to determine the highest risk-weight could include the STC(S) approach.

2(c) **Other unrated re-securitization exposures**

All unrated re-securitization exposures other than those mentioned above should be reported in this item. Also, included in this item unrated credit-enhancing interest-only strips (after deduction of any amount that has been deducted from the CET1 capital as gain-on-sale).

3 If the exposures reported in item *1* or *2* contain liquidity facilities or servicer cash advance facilities, report the total amount of such facilities reported in item *1* and *2* in this item.

Division IIC Liquidity Facilities and Servicer Cash Advance Facilities under STC(S) Approach

1(i) to (xi) **Undrawn portion of unrated eligible liquidity facilities / eligible servicer cash advance facilities that are not re-securitization exposures**

Included in these sub-items are the undrawn portions of liquidity facilities and servicer cash advance facilities -

(a) that satisfy the criteria set out in section 240(1) (or section 240(6) in the case of servicer cash advance facilities) of the BCR;

(b) that do not have ECAI issue specific ratings; and

(c) that are not re-securitization exposures.

The drawn portions of these facilities should be reported in item *2(a)* of Division IIA.

The risk-weight to be assigned to the undrawn portion of an eligible liquidity facility or an eligible servicer cash advance facility is the highest risk-weight that would be assigned to any of the underlying exposures covered by the facility under the approach (i.e. the BSC approach or STC approach) used by the reporting institution to calculate its credit risk for the class of exposures into which the underlying exposures would fall if they were held by the institution (See also section 240(2) of the BCR). However, if the facility does not meet any of the requirements set out in section 230A of the BCR, a risk-weight of 1250% should be assigned to the undrawn portion of the facility.

Both the drawn and undrawn portions of eligible liquidity facilities and eligible servicer cash advance facilities (except the undrawn portions of eligible servicer cash advance facilities that are eligible for 0% CCF) with ECAI issue specific ratings should be reported in item *1* of Division IIA with risk-weights determined according to the ECAI issue specific ratings assigned to the facilities.

2(i) to (ix) **Undrawn portion of unrated eligible liquidity facilities / eligible servicer cash advance facilities that are re-securitization exposures**

Included in these sub-items are the undrawn portions of liquidity facilities and servicer cash advance facilities -

(d) that satisfy the criteria set out in section 240(1) (or section 240(6) in the case of servicer cash advance facilities) of the BCR;

(e) that do not have ECAI issue specific ratings; and

(f) that are re-securitization exposures.

The drawn portions of these facilities should be reported in item *2(a)* of Division IIB.

The method of determining the risk-weight to be assigned to the undrawn portion of an eligible liquidity facility or an eligible servicer cash advance facility is the same as that of item *1* above except that the approaches that would be used to determine the highest risk-weight could include the STC(S) approach.

Both the drawn and undrawn portions of eligible liquidity facilities and eligible servicer cash advance facilities (except the undrawn portions of eligible servicer cash advance facilities that are eligible for 0% CCF) with ECAI issue specific ratings should be reported in item *1* of Division IIB with risk-weights determined according to the ECAI issue specific ratings assigned to the facilities.

3(i) **Undrawn portion of unrated non-eligible liquidity facilities / non-eligible servicer cash advance facilities**

Reported in this sub-item the undrawn portions of unrated liquidity facilities and servicer cash advance facilities that do not satisfy the criteria set out in section 240(1) (or section of 240(6) in the case of servicer cash advance facilities) of the BCR.

Drawn portions of rated non-eligible liquidity facilities and servicer cash advance facilities should be reported in item *1* of Division IIA or IIB of the Form, while the drawn portions of unrated non-eligible liquidity facilities and servicer cash advance facilities should be reported in item *2(a)* of Division IIA or IIB of the Form.

4(i) **Undrawn portion of eligible servicer cash advance facilities that are subject to 0% CCF**

Reported in this sub-item are the undrawn portions of servicer cash advance facilities that satisfy the criteria set out in section 240(7) of the BCR.

C.2 Calculation and Reporting of Risk-weighted Amount

26. For each securitization exposure, the RWA of the exposure is calculated by-

(a) in the case of an on-balance sheet securitization exposure, multiplying its principal amount after CRM reported in the Form by an appropriate risk-weight determined as described in Section C.1 above.

(b) in the case of an off-balance sheet securitization exposure, multiplying its CEA (obtained by multiplying the principal amount after CRM of the exposure reported in the Form by an appropriate CCF) by an appropriate risk-weight determined as described in Section C.1 above.

27. The reporting arrangement for securitization exposures covered by CRM are set out below:

(a) CRM treatment applicable to reporting institutions using the STC approach

(i) **CRM treatment by substitution of risk-weights**, which applies to collateral under the simple approach, guarantees and credit derivative contracts.

(A) Firstly, identify the item to which the securitization exposure belongs in accordance with the instructions set out in Section C.1, then report the whole principal amount (after deduction of specific provisions) of the exposure in the column of "Principal Amount" of that item and in the row for the risk-weight applicable to that exposure.

(B) Secondly, divide the reported principal amount of the exposure into two portions: the portion covered by credit protection and the uncovered portion.

- For guarantees and credit derivative contracts, the value of credit protection is the maximum liability of the credit protection provider to the reporting institution under the credit protection, subject to a ***haircut*** as set out in section 100 of the BCR if there is currency mismatch.

- For collateral, the value of credit protection is the current market value of the collateral, subject to a discount as set out in section 81(4) of the BCR if the collateral is real property.

(C) Thirdly, report the amount of the covered portion under the item to which the exposure belongs in the column of "Principal Amount after CRM" and in the row for the risk-weight applicable to the credit protection. The risk-weight applicable to the credit protection is determined in accordance with section 81, 82, 100 or 101 of the BCR, as the case requires.

- In the case of an on-balance sheet securitization exposure, the RWA of the covered portion is calculated by multiplying the amount of the covered portion by the risk-weight attributable to the credit protection.

- In the case of an off-balance sheet securitization exposure, the RWA of the covered portion is calculated by multiplying the CEA of the covered portion (obtained by multiplying the amount of the covered portion by the CCF applicable to the exposure) by the risk-weight attributable to the credit protection.

(D) Lastly, report the amount of the uncovered portion under the item to which the exposure belongs, in the column of "Principal Amount after CRM" and in the row for the risk-weight applicable to the exposure.

The RWA of the uncovered portion is then calculated by –

- in the case of an on-balance sheet securitization exposure, multiplying the amount of the uncovered portion by the risk-weight attributable to the exposure.

- in the case of an off-balance sheet securitization exposure, multiplying the CEA of the uncovered portion (obtained by multiplying the amount of the uncovered portion by the CCF applicable to the exposure) by the risk-weight attributable to the exposure.

(ii) <u>**CRM treatment by reduction of principal amount of an exposure**</u>, which applies to collateral under the comprehensive approach and on-balance sheet netting:

(A) Comprehensive approach for collateral

- Firstly, report the whole principal amount (after deduction of specific provisions) of a securitization exposure in the column of "Principal Amount" under the item to which the exposure belongs, in the row for the risk-weight applicable to that exposure.

- Secondly, subtract the value of collateral from the reported principal amount of the exposure with the application of ***haircuts*** in the manner as set out in section 87 or 88 of the BCR, as the case requires. Report the net amount (i.e. the credit protection uncovered portion) in the column of "Principal Amount after CRM" under the <u>same</u> item to which the exposure belongs, and in the <u>same</u> row for the risk-weight applicable to that exposure.

- Thirdly, report in the column of "Risk-weighted Amount" the RWA calculated by-

  - in the case of an on-balance sheet securitization exposure, multiplying the amount of the uncovered portion by the risk-weight applicable to the exposure;

  - in the case of an off-balance sheet securitization exposure, multiplying the CEA of the uncovered portion (obtained by multiplying the amount of the uncovered portion by the CCF applicable to the exposure) by the risk-weight applicable to the exposure.

(B) On-balance sheet netting

- Firstly, report the whole principal amount (after deduction of specific provisions) of an on-balance sheet securitization exposure in the column of "Principal Amount" under the item to which the exposure belongs, in the row for the risk-weight applicable to the exposure.

- Secondly, determine the principal amount after CRM in the manner as set out in section 94 of the BCR and report the amount in the column of "Principal Amount after CRM" under the same item to which the exposure belongs, and in the same row of the risk-weight applicable to the exposure.

- Thirdly, report in the column of "Risk-weighted Amount" the RWA calculated by multiplying the principal amount after CRM reported in the Form by the risk-weight of the exposure.

(iii) **Maturity mismatches**

Where there is a maturity mismatch between a securitization exposure and the credit protection covering the exposure, the value of the credit protection should be adjusted in accordance with section 103 of the BCR.

(b) CRM treatment applicable to reporting institutions using the BSC approach

(i) **CRM treatment by substitution of risk-weights**, which applies to the use of collateral, guarantees and credit derivative contracts.

The same reporting arrangement as set out in paragraph (a)(i) above applies except that the value of the credit protection and risk-weight applicable to the credit protection should be determined in accordance with section 126, 134, 135 and 137 of the BCR.

(ii) **On-balance sheet netting**

The same reporting arrangement as set out in paragraph (a)(ii)(B) above applies except that the principal amount after CRM should be determined in accordance with section 130 of the BCR.

28. Multiple credit risk mitigation

Where a securitization exposure is covered by two or more types of recognized CRM, the covered portions should be determined in accordance with section 102 of the BCR for reporting institutions using the STC approach and section 136 of the BCR for reporting institutions using the BSC approach.

Section D: Specific Instructions for IRB(S) Approach

29. Under the IRB(S) approach, a securitization exposure is rated if it has an ECAI issue specific rating or, in the absence of an ECAI issue specific rating, an ***inferred rating*** attributed by the reporting institution. The conditions for the use of inferred ratings are set out in section (B) III in **Annex IIId-B**. Details of the risk-weighting requirements under the ratings-based method are set out in Divisions 4 and 5 of Part 7 of the BCR.

30. A securitization exposure is unrated if it does not have an ECAI issue specific rating or an inferred rating. Subject to the MA's prior approval, the capital charge of the unrated securitization exposures is calculated through the use of the supervisory formula method. Details of the risk-weighting requirements under the supervisory formula method are set out in Divisions 4 and 6 of Part 7 of the BCR.

31. If the ECAI issue specific rating of a rated securitization exposure held by the reporting institution is at least partly based on unfunded support (e.g. liquidity facilities) provided by the institution (i.e. self-guarantee), the institution should treat the exposure as unrated securitization exposure for the purposes of capital requirement calculation.

Division IIIA Rated Securitization Exposures calculated by Ratings-based Method under IRB(S) Approach (excluding exposures reported in Divisions IIIB & V)

Calculation of RWA

32. The RWA of a rated securitization exposure is calculated by applying the risk-weight applicable to the exposure by reference to its ECAI issue specific rating or the inferred rating attributed by the reporting institution as follows:

    (a) for an on-balance sheet securitization exposure, the RWA is the product of the principal amount of the exposure and the applicable risk-weight specified in **Annex IIId-C**;

    (b) for an off-balance sheet securitization exposure, a CCF of 100% is applied to the principal amount of the exposure to determine the CEA. The RWA is the product of the CEA of the exposure after CRM and the applicable risk-weight; and

    (c) in respect of a securitization exposure where either full or partial credit protection has been obtained, the treatment described in paragraph 43, 44 or 45 as appropriate should be followed in determining the RWA.

33. Off-balance sheet securitization exposures in this Division include rated liquidity facilities and servicer cash advance facilities but exclude exposures arising from investors' interest (which should be reported in Division V).

34. The adjusted RWA of a securitization exposure is calculated by reducing the RWA of the exposure by an amount equal to the risk-weight of the exposure (determined in accordance with section 262 of the BCR) multiplied by the aggregate amount of any valuation adjustment and specific provision made in respect of the exposure.

Determination of risk-weight

35. The ECAI issue specific rating of a securitization exposure is used to determine the risk-weight of the exposure. This can be achieved by mapping the ECAI issue specific rating of the exposure to a scale of credit quality grades. **Annex IIId-C** sets out how different sets of notations used by different ECAIs are mapped to the credit quality grades under the ratings-based method and the relevant risk-weights of each credit quality grade.

36. The risk-weight applicable to a securitization exposure (other than a re-securitization exposure and a liquidity facility irrespective of whether it is a securitization or re-securitization exposure) under each credit quality grade depends on:

    (a) whether the exposure is **senior**;

    (b) whether the exposure is **granular** (i.e. the effective number of underlying exposures is not less than 6); and

    (c) whether the credit assessment rating (external or inferred) represents a long-term or a short-term credit rating.

37. A ***securitization position*** is treated as **senior** if it is effectively backed or secured by a first legal claim on the entire amount outstanding in respect of the underlying exposures in the securitization transaction concerned. Any interest rate contract or exchange rate contract for hedging the respective interest rate risk or foreign exchange risk in the transaction, or fees or other similar payments due under the transaction, will not be taken into account for the purpose of considering whether a securitization position is senior.

38. A securitization position is treated as **granular** if the underlying exposures of the securitization position have an effective number of not less than 6. Otherwise, it is treated as non-granular.

39. The effective number of underlying exposures is calculated by treating multiple exposures to one ***obligor*** as one exposure and using the following formula:

$$N = \frac{\left(\sum_i \mathrm{EAD}_i\right)^2}{\sum_i \mathrm{EAD}_i^{\,2}}$$

where -

N	=	effective number of underlying exposures; and
EAD_i	=	the ***EAD*** associated with the i^{th} obligor in the pool of underlying exposures.

40. The risk-weight applicable to a liquidity facility which is a securitization exposure under each credit quality grade depends on:

    (a) whether the liquidity facility is **senior**; and

    (b) whether the credit assessment rating (external or inferred) represents a long-term or a short-term credit rating.

41. A liquidity facility is treated as senior when (1) it covers all of the outstanding debts (including debts that are senior) supported by the pool of underlying exposures in the securitization transaction concerned; and (2) its repayment has seniority over the outstanding debts referred to in item (1) of this paragraph.

42. While a senior securitization position generally includes only the most senior position within a securitization transaction, there are cases where some other claims more senior in the waterfall (e.g. a swap claim) in a technical sense may be disregarded for the purpose of determining whether the positions are senior. Examples include:

    (a) in a synthetic securitization transaction, the “super-senior” tranche will be treated as a senior position, provided that all of the conditions for inferring a rating from a lower tranche are satisfied;

(b) in a traditional securitization transaction where all tranches above the first-loss position are rated, the most highly rated position will be treated as a senior position. However, where there are several tranches that share the same rating, only the most senior one in the waterfall will be treated as senior; and

(c) a liquidity facility supporting an ABCP programme will not normally be the most senior position within the programme; the commercial paper which benefits from the liquidity support to achieve the desired external rating on the paper will be the most senior position.

Credit risk mitigation

43. **Recognized financial collateral**

If a rated securitization exposure is covered by ***recognized financial collateral***, irrespective of whether full or partial credit protection has been obtained, the reporting institution should:

for on-balance sheet exposures -

(a) measure the CRM effect by using Formula 19 set out in section 160 of the BCR to adjust the EAD of the rated securitization exposure (Formula 19 basically follows Formulae 2 and 3 under the comprehensive approach set out in sections 87 and 88 of the BCR respectively, except that the EAD of the exposure is measured gross of specific provisions in Formula 19 whereas the principal amount of the exposure is measured net of specific provisions in Formulae 2 and 3.);

(b) report the EAD of the exposure before adjusting the CRM effect in the column of "Principal Amount" under "On-balance Sheet Exposures" and in the row with the risk-weight applicable to the exposure and the adjusted EAD calculated in subparagraph (a) above in the column of "Principal Amount after CRM" under "On-balance Sheet Exposures" and in the same row; and

for off-balance sheet exposures -

(c) apply the same steps mentioned in subparagraphs (a) and (b) above except that the EAD and adjusted EAD of the exposure should be reported in the columns of "Principal Amount" and "Principal Amount after CRM" respectively under "Off-balance Sheet Exposures".

44. **<u>Recognized guarantee</u> or <u>recognized credit derivative contract</u>**

If a rated securitization exposure is covered by a ***recognized guarantee*** or a ***recognized credit derivative contract***, irrespective of whether full or partial credit protection has been obtained, the reporting institution should:

<u>for on-balance sheet exposures -</u>

(a) split the EAD of the rated securitization exposure into covered portion and uncovered portion, if the exposure is partially covered by a recognized guarantee or a recognized credit derivative contract;

(b) measure the CRM effect of the covered portion by using the substitution framework as set out in sections 214(1), 215 and 216 of the BCR. For this purpose, the risk-weight applicable to the credit protection provider is determined under the IRB approach in section 216(3), section 216(3) and (3A) or section 216(3B) as the case may be;

(c) report the EAD of the exposure before adjusting the CRM effect in the column of "Principal Amount" and the EAD of the uncovered portion in the column of "Principal Amount after CRM" under "On-balance Sheet Exposures" in the same row with the risk-weight applicable to the exposure. The EAD of the covered portion is reported in the column of "Principal Amount after CRM" under "On-balance Sheet Exposures" in the row with the risk-weight of the credit protection provider or in item *3* if the risk-weight of the credit protection provider is not listed in the various sub-items of items *1* and *2*; and

<u>for off-balance sheet exposures -</u>

(d) apply the same steps mentioned in subparagraphs (a) to (c) above except that the EAD and adjusted EAD of the exposure should be reported in the columns of "Principal Amount" and "Principal Amount after CRM" respectively under "Off-balance Sheet Exposures".

45. **Recognized netting**

If a rated securitization exposure is covered by ***recognized netting***, irrespective of whether full or partial credit protection has been obtained, the reporting institution should:

<u>for on-balance sheet exposures -</u>

(a) measure the CRM effect in calculating the EAD of the exposure in accordance with section 209(1), (2)(a) and (4) in off-setting the credit risk of the securitization exposure held by the institution, and multiply the EAD of the exposure by the risk-weight determined in accordance with paragraph 35;

(b) report the EAD of the securitization exposure before adjusting the CRM effect in the column of "Principal Amount" and report the adjusted EAD in the column of

"Principal Amount after CRM" under "On-balance Sheet Exposures" in the same row with the risk-weight applicable to the exposure; and

<u>*for off-balance sheet exposures -*</u>

(c) apply the same steps mentioned in subparagraphs (a) and (b) above except that the relevant amounts should be reported under "Off-balance Sheet Exposures".

46. The following explains the relevant principles for reporting rated securitization exposures under the items / columns in Division IIIA:

<u>Item</u>	<u>Nature of item</u>
1 – 4	These items are meant to be mutually exclusive.
1	**Securitization exposures rated with investment grade**
1(a) to (c)	A securitization exposure rated with investment grade means: (i) if the exposure has a long-term credit assessment rating, the exposure is mapped to a long-term credit quality grade (LTCQG) of 1, 2, 3, 4, 5, 6, 7 or 8 in accordance with **Table A** of **<u>Annex IIId-C</u>**; and (ii) if the exposure has a short-term credit assessment rating, the exposure is mapped to a short-term credit quality grade (STCQG) of 1, 2 or 3 in accordance with **Table B** of **<u>Annex IIId-C</u>**.
*1(a)(i) t*o (ix)	**Senior positions backed by granular pools** These sub-items capture securitization positions that are senior and the underlying exposures of which are granular.
1(b)(i) to (ix)	**Mezzanine positions backed by granular pools** These sub-items capture securitization positions that are not senior but the underlying exposures of which are granular.
1(c)(i) to (ix)	**Positions backed by non-granular pools** These sub-items capture securitization positions the underlying exposures of which are non-granular, regardless of whether the positions are senior or not.
2	**Securitization exposures rated below investment grade**
2(i) to (v)	A securitization exposure rated below investment grade means:

(i) if the exposure has a long-term credit assessment rating, the exposure is mapped to a LTCQG of 9, 10, 11 or 12 in accordance with **Table A** of **Annex IIId-C**; and

(ii) if the exposure has a short-term credit assessment rating, the exposure is mapped to a STCQG of 4 in accordance with **Table B** of **Annex IIId-C**.

3 **Securitization exposures covered by CRM and subject to risk-weights other than those listed above**

This item captures securitization exposures covered by CRM where the risk-weight of the covered portion is not subject to the risk-weights listed under the various sub-items of items *1* and *2*.

4 This item captures eligible servicer cash advance facilities that are unconditionally cancellable (by the reporting institution) without prior notice to which a CCF of 0% is applicable.

5(i) Report the amount of liquidity facilities and servicer cash advance facilities included in item 5.

Column — Nature of column

5 & 11 **Adjusted risk-weighted amount**

These columns represent the RWA after valuation adjustment and specific provision in respect of the securitization exposures reported under on-balance sheet exposures or off-balance sheet exposures, as the case may be, in the same row.

12 **Total adjusted risk-weighted amount**

This column represents the sum of the adjusted RWAs for all on-balance sheet exposures and off-balance sheet exposures.

47. For the purpose of this return, where a reporting institution uses Ratings-based Method under the IRB(S) approach,
    (i) any credit-enhancing interest-only strip recorded by an originating institution in a securitization transaction (after deduction of any gain-on-sale arising from the credit-enhancing interest-only strip); and
    (ii) any rated securitization exposure of the reporting institution in any case where it is not in compliance, whether in whole or in part, with section 230A in respect of that exposure,

should be reported under item *(2)(iv)* in this Division.

Division IIIB Rated Re-securitization Exposures calculated by Ratings-based Method under IRB(S) Approach (excluding exposures reported in Division V)

Calculation of RWA

48. The RWA of a rated re-securitization exposure is calculated by applying the risk-weight applicable to the exposure by reference to its ECAI issue specific rating or the inferred rating attributed by the reporting institution as follows:

(a) for an on-balance sheet re-securitization exposure, the RWA is the product of the principal amount of the exposure and the applicable risk-weight specified in **Annex IIId-C**;

(b) for an off-balance sheet re-securitization exposure, a CCF of 100% is applied to the principal amount of the exposure to determine the CEA. The RWA is the product of the CEA of the exposure after CRM and the applicable risk-weight; and

(c) in respect of a re-securitization exposure where either full or partial credit protection has been obtained, the treatment described in paragraph 43, 44 or 45 as appropriate should be followed in determining the RWA.

49. Off-balance sheet re-securitization exposures in this Division include rated liquidity facilities and servicer cash advance facilities but exclude exposures arising from investors' interest.

50. The adjusted RWA is calculated by reducing the RWA of a re-securitization exposure by an amount equal to the risk-weight of the exposure (determined in accordance with section 262 of the BCR) multiplied by the aggregate amount of any valuation adjustment and specific provision made in respect of the exposure.

Determination of risk-weight

51. The ECAI issue specific rating of a re-securitization exposure is used to determine the risk-weight of the exposure. This can be achieved by mapping the ECAI issue specific rating of the exposure to a scale of credit quality grades. **Annex IIId-C** sets out how different sets of notations used by different ECAIs are mapped to the credit quality grades under the ratings-based method and the relevant risk-weights of each credit quality grade.

52. The risk-weight applicable to a re-securitization exposure (other than a liquidity facility) under each credit quality grade depends on:

(a) whether the re-securitization exposure is **senior**; and

(b) whether the credit assessment rating (external or inferred) represents a long-term or a short-term credit rating.

53. A senior re-securitization exposure means a re-securitization exposure that satisfies the conditions described in paragraph 37 and where its underlying exposures do not contain any re-securitization exposures.

54. The risk-weight applicable to a liquidity facility which is a re-securitization exposure under each credit quality grade depends on the conditions set out in paragraphs 40 to 42.

55. For the avoidance of doubt, the effective number of underlying exposures (i.e. for determination of granularity) is not necessary for a re-securitization exposure under rating-based method.

Credit risk mitigation

56. Please see paragraphs 43 to 45 for credit risk mitigation treatment in relation to rated re-securitization exposures.

57. The following explains the relevant principles for reporting rated re-securitization exposures under the items / columns in Division IIIB:

Item	Nature of item
1 – 4	**These items are meant to be mutually exclusive.**
1	**Senior re-securitization exposures**
1(a)	A re-securitization exposure rated with investment grade means: (i) if the exposure has a long-term credit assessment rating, the exposure is mapped to a long-term credit quality grade (LTCQG) of 1, 2, 3, 4, 5, 6, 7 or 8 in accordance with **Table C** of **Annex IIId-C**; and (ii) if the exposure has a short-term credit assessment rating, the exposure is mapped to a short-term credit quality grade (STCQG) of 1, 2 or 3 in accordance with **Table D** of **Annex IIId-C**.
1(b)	A re-securitization exposure rated below investment grade means: (i) if the exposure has a long-term credit assessment rating, the exposure is mapped to a LTCQG of 9, 10, 11 or 12 in accordance with **Table C** of **Annex IIId-C**; and (ii) if the exposure has a short-term credit assessment rating, the exposure is mapped to a STCQG of 4 in accordance with **Table D** of **Annex IIId-C**.
2	**Non-senior re-securitization exposures**
2(a)	A re-securitization exposure rated with investment grade means: (j) if the exposure has a long-term credit assessment rating, the exposure is mapped to a long-term credit quality grade (LTCQG) of 1, 2, 3, 4, 5, 6, 7 or 8 in accordance with **Table C** of **Annex IIId-C**; and

(ii) if the exposure has a short-term credit assessment rating, the exposure is mapped to a short-term credit quality grade (STCQG) of 1, 2 or 3 in accordance with **Table D** of **<u>Annex IIId-C</u>**.

2(b) A re-securitization exposure rated below investment grade means:

(j) if the exposure has a long-term credit assessment rating, the exposure is mapped to a LTCQG of 9, 10, 11 or 12 in accordance with **Table C** of **<u>Annex IIId-C</u>**; and

(ii) if the exposure has a short-term credit assessment rating, the exposure is mapped to a STCQG of 4 in accordance with **Table D** of **<u>Annex IIId-C</u>**.

3 **Re-securitization exposures covered by CRM and subject to risk-weights other than those listed above**

This item captures re-securitization exposures covered by CRM where the risk-weight of the covered portion is not subject to the risk-weights listed under the various sub-items of items *1* and *2*.

4 This item captures eligible servicer cash advance facilities that are unconditionally cancellable (by the reporting institution) without prior notice to which a CCF of 0% is applicable.

5(i) Report the amount of liquidity facilities and servicer cash advance facilities included in item 5.

<u>Column</u> <u>Nature of column</u>

5 & 11 **Adjusted risk-weighted amount**

These columns represent the RWA after valuation adjustment and specific provision in respect of the re-securitization exposures reported under on-balance sheet exposures or off-balance sheet exposures, as the case may be, in the same row.

12 **Total adjusted risk-weighted amount**

This column represents the sum of the adjusted RWAs for all on-balance sheet exposures and off-balance sheet exposures.

58. For the purpose of this return, where a reporting institution uses Ratings-based Method under the IRB(S) approach,
    (i) any credit-enhancing interest-only strip recorded by an originating institution in a securitization transaction (after deduction of any gain-on-sale arising from the credit-enhancing interest-only strip); and
    (ii) any rated re-securitization exposure of the reporting institution in any case where it is not in compliance, whether in whole or in part, with section 230A in respect of that exposure,

should be reported under item *(1)(b)(iv)* or *(2)(b)(iv)*, as the case requires, in this Division.

Division IIIC Unrated Securitization Exposures calculated by Supervisory Formula Method or the method specified in section 277(3) of the Rules ("fallback option") under IRB(S) Approach (excluding exposures reported in Division V)

Supervisory formula method

Calculation of RWA

59. The RWA of unrated securitization exposures (irrespective of on- or off-balance sheet) is arrived at by multiplying the capital charge of the securitization exposure (calculation set out in paragraph 64) by 12.5.

60. Off-balance sheet securitization exposures for which the supervisory formula method is applicable in this Division include the unrated liquidity facilities and servicer cash advance facilities but exclude exposures arising from investors' interest.

61. The adjusted RWA is calculated by reducing the RWA of a securitization exposure by an amount equal to the risk-weight of the exposure (determined in accordance with section 270(4) of the BCR) multiplied by the aggregate amount of any valuation adjustment and specific provision made in respect of the exposure.

Use of supervisory formula

62. The supervisory formula is:

$$S[L] = \begin{cases} L & \text{when } L \le K_{IRB} \\ K_{IRB} + K[L] - K[K_{IRB}] + (d \cdot K_{IRB}/\omega(1 - e^{\omega(K_{IRB} - L)/K_{IRB}}) & \text{when } K_{IRB} < L \end{cases}$$

where –

$$h = \left(1 - K_{IRB} / LGD\right)^{N};$$

$$c = K_{IRB} / \left(1 - h\right);$$

$$v = \frac{\left(LGD - K_{IRB}\right) K_{IRB} + 0.25\left(1 - LGD\right) K_{IRB}}{N};$$

$$f = \left(\frac{v + K_{IRB}^{2}}{1 - h} - c^{2}\right) + \frac{\left(1 - K_{IRB}\right) K_{IRB} - v}{\left(1 - h\right)\tau};$$

$$g = \frac{\left(1 - c\right) c}{f} - 1;$$

$$a = g \cdot c;$$

$$b = g \cdot \left(1 - c\right);$$

$$d = 1 - (1 - h) \cdot (1 - \text{Beta}[K_{IRB}; a, b]);$$

$$K[L] = (1 - h) \cdot ((1 - \text{Beta}[L; a, b])L + \text{Beta}[L; a + 1, b]c);$$

$\tau = 1000$;

$\omega = 20$; and

Beta [L; a, b] = cumulative beta distribution with parameters a and b evaluated at L.

63. The capital charge factor calculated under the supervisory formula for a securitization position held by a reporting institution in a given tranche of a securitization transaction depends on five inputs:

(a) the capital charge factor for the underlying exposures calculated using the IRB approach as if those underlying exposures were directly held by the institution (K_{IRB});

(b) the tranche's credit enhancement level (L);

(c) the tranche's thickness (T);

(d) the pool's effective number of the underlying exposures (N); and

(e) the pool's exposure-weighted average LGD.

64. The capital charge for any securitization positions held by a reporting institution in a given tranche of a securitization transaction is calculated by multiplying:

(a) the EAD of the underlying exposures in the transaction; by

(b) the greater of:

(i) the product of 0.0056 multiplied by T in the case of a securitization exposure which is not a re-securitization exposure and the product of 0.016 multiplied by T in the case of a re-securitization exposure; or

(ii) the excess of S[L+T] over S[L]

where

(i) the EAD refers to the sum of principal amount of on-balance sheet underlying exposures and the CEA of off-balance sheet underlying exposures; and

(ii) function S[.] is the supervisory formula.

65. If only a proportional interest in a tranche is held, the capital charge for that interest equals the prorated share of the capital charge for the entire tranche.

K_{IRB}

66. $\mathbf{K_{IRB}}$ is the capital charge factor for underlying exposures under the IRB approach measured as the ratio, expressed in decimal form, of:

(a) the sum of the capital charge and the EL amount calculated under the use of the IRB approach for the pool of underlying exposures in a securitization transaction as if the pool of underlying exposures were held directly by the reporting institution; to

(b) the EAD of the underlying exposures (see paragraph 64).

67. Where a reporting institution has made a specific provision or a partial write-off in respect of, or has a non-refundable purchase price discount on, an underlying exposure in the pool, items (a) and (b) defined in paragraph 66 are calculated using the gross amount of the underlying exposure without deducting the specific provision, partial write-off or non-refundable purchase price discount. If the underlying exposure is regarded as in default in section 149 under the IRB approach, the amount of specific provision, partial write-off or non-refundable purchase price discount on the defaulted exposure may be used to reduce the amount of the capital charge for the securitization exposure that is subject to an effective risk-weight of 1250%.

68. If there is an SPE in a securitization transaction, all the assets of the SPE that are related to the transaction are to be treated as underlying exposures in the pool, including assets invested by the SPE in the form of a reserve account, such as a cash collateral account.

Credit enhancement level (L)

69. **L** of a given tranche in a securitization transaction is measured as the ratio, expressed in decimal form, of:

(a) the outstanding amounts of all tranches subordinate to the tranche of the transaction; to

(b) the EAD of the underlying exposures in the transaction (see paragraph 64).

70. L is determined before considering the effects of any tranche-specific credit enhancement, such as third-party guarantees that cover only a single tranche. Any gain-on-sale or credit enhancing interest-only strip in the securitization transaction is excluded from the measurement of L.

71. If any interest rate contract or exchange rate contract in the securitization transaction ranks junior for payment to the tranche in question, the institution may measure the size of the contract at its ***current exposure*** in calculating L. If the current exposure of the instrument cannot be measured, the contract will be ignored in the calculation of L.

72. Reserve accounts funded by accumulated cash flows from the underlying exposures that are more junior than the tranche in question can be included in the calculation of L. Unfunded reserve accounts that are to be funded from future receipts from the underlying exposures are excluded from the calculation of L.

Thickness of tranche (T)

73. **T** of a given tranche in a securitization transaction is measured as the ratio, expressed in decimal form, of:

   (a) the nominal amount of the tranche of the transaction; to

   (b) the nominal amount of the underlying exposures in the transaction.

74. The nominal amount of the exposure arising from an interest rate contract or exchange rate contract is measured as:

   (a) the sum of the current exposure of the contract concerned and potential exposure if the current exposure is not negative; or

   (b) the potential exposure only if the current exposure is negative,

Effective number of underlying exposures (N)

75. In general, the formula for determining the effective number of underlying exposures is provided in paragraph 39 above. Please also see paragraphs 80 to 82 for simplified method.

Exposure-weighted average LGD

76. The exposure-weighted average LGD is calculated as follows. Please also see paragraphs 80 and 82 for simplified method.

$$\text{Exposure-weighted average LGD} = \frac{\sum_i \mathrm{LGD}_i \cdot \mathrm{EAD}_i}{\sum_i \mathrm{EAD}_i}$$

where –

LGD_i = the average LGD associated with the i^{th} obligor in the pool of underlying exposures; and

EAD_i = the EAD associated with the i^{th} obligor in the pool of underlying exposures.

77. For a re-securitization transaction, an LGD of 100% is applied to the securitization exposures in the pool of underlying exposures for the transaction.

78. If the underlying exposures in a securitization transaction are purchased receivables and the default risk and dilution risk for the purchased receivables are treated in an aggregate manner (e.g. a single reserve or over-collateralization is available to cover losses from either default risk or dilution risk), the LGD input is determined as a weighted average of the LGD for default risk and a 100% LGD for dilution risk.

79. The weights of the LGD for default risk and the LGD for dilution risk are determined by reference to the proportion that the capital charge calculated for that default risk and the capital charge calculated for that dilution risk respectively bear to the aggregate capital charge calculated for default risk and dilution risk.

<u>Simplified method for calculating N and exposure-weighted average LGD</u>

80. If C_1 in the pool of underlying exposures is not more than 0.03, the exposure-weighted average LGD may be set at 0.50 and N may be calculated by using the formula in paragraph 81.

81. The simplified method for calculating N is as follows:

$$N = \left(C_1 C_m + \left(\frac{C_m - C_1}{m - 1} \right) \max \{1 - m C_1, 0\} \right)^{-1}$$

where –

C_1 = the share of largest exposure in the pool of underlying exposures;

C_m = the share of the pool of underlying exposures corresponding to the sum of the largest "m" exposures (for example, a 15% share corresponds to a value of 0.15) and the level of "m" is set by the reporting institution making the regulatory capital calculation.

82. If only C_1 is known to the reporting institution and its share in the pool of underlying exposures is not more than 0.03, the exposure-weighted average LGD may be set at 0.50 and N may be calculated as $1/C_1$.

83. If the underlying exposures are retail exposures, the values for h and v in the supervisory formula can be set as zero.

Determination of risk-weight

84. The risk-weight of an unrated securitization exposure for which the supervisory formula method is applicable in this Division is measured as the greater of –

(a) 7% in the case of a securitization exposure that is not a re-securitization exposure and 20% in the case of a re-securitization exposure; or

(b) the effective risk-weight determined by multiplying the capital charge factor for the position calculated by the use of supervisory formula by 12.5 and then dividing it by T.

Credit risk mitigation

85. Illustrative examples on calculating the effect of CRM under supervisory formula method are provided in **Annex IIId-D**.

86. If an unrated securitization exposure is fully covered by recognized financial collateral, the reporting institution should:

for on-balance sheet exposures -

(a) measure the CRM effect by using Formula 19 of the BCR to arrive at an adjusted EAD of the unrated securitization exposure;

(b) determine the risk-weight applicable to the securitization exposure in accordance with paragraph 84;

(c) determine the RWA of the securitization exposure by multiplying the adjusted EAD referred to in subparagraph (a) by the risk-weight referred to in subparagraph (b), and report the RWA in the column of "Risk-weighted amount";

(d) determine the adjusted RWA of the securitization exposure after considering the valuation adjustment and specific provision in accordance with paragraph 61, and report the adjusted RWA in the column of "Adjusted risk-weighted amount";

(e) report the EAD of the securitization exposure before adjusting the CRM effect in the column of "Principal Amount" and the adjusted EAD calculated in subparagraph (a) above in the column of "Principal Amount after CRM" under "On-balance Sheet Exposures" and in the same row with the range of risk-weights under which the risk-weight applicable to such exposure falls; and

for off-balance sheet exposures -

(f) apply the same steps mentioned in subparagraphs (a) to (e) above, except that the relevant amounts should be reported under "Off-balance Sheet Exposures".

87. If an unrated securitization exposure is fully covered by a recognized guarantee or recognized credit derivative contract, the reporting institution should:

for on-balance sheet exposures -

(a) measure the CRM effect by using the substitution framework as set out in sections 214(1), 215 and 216 of the BCR. For this purpose, the risk-weight applicable to the credit protection provider is determined under the IRB approach in section 216(3), section 216(3) and (3A) or section 216(3B) as the case may be;

(b) report the EAD of the securitization exposure before adjusting for the CRM effect in the column of "Principal Amount" under "On-balance Sheet Exposures" in the same row with the risk-weight applicable to the exposure. The EAD, after adjusting for the CRM effect, is reported in the column of "Principal Amount after CRM" under "On-balance Sheet Exposures" in the row with the risk-weight of the credit protection provider;

(c) determine the adjusted RWA of the securitization exposure after considering the valuation adjustment and specific provision in accordance with paragraph 61, and report the adjusted RWA in the column of “Adjusted risk-weighted amount”; and

for off-balance sheet exposures -

(d) apply the same steps mentioned in subparagraphs (a) to (c) above except that the relevant amounts should be reported under “Off-balance Sheet Exposures”.

88. If an unrated securitization exposure is fully covered by recognized netting, the reporting institution should:

for on-balance sheet exposures -

(a) measure the CRM effect in calculating the EAD of the exposure in accordance with section 209(1), (2)(a) and (4) of the BCR in off-setting the credit risk of the securitization exposure held by the institution, and multiply the EAD of the exposure by the risk-weight determined in accordance with paragraph 84;

(b) report the EAD of the securitization exposure before adjusting the CRM effect in the column of “Principal Amount” and report the adjusted EAD in the column of “Principal Amount after CRM” under “On-balance Sheet Exposures” in the same row with the risk-weight applicable to the exposure;

(c) determine the adjusted RWA of the securitization exposure after considering the valuation adjustment and specific provision in accordance with paragraph 61, and report the adjusted RWA in the column of “Adjusted risk-weighted amount”; and

for off-balance sheet exposures -

(d) apply the same steps mentioned in subparagraphs (a) and (c) above except that the relevant amounts should be reported under “Off-balance Sheet Exposures”.

89. If an unrated securitization exposure is partially covered by recognized financial collateral, a recognized guarantee, a recognized credit derivative contract or recognized netting, and the credit protection covers first losses, or covers losses proportionately in accordance with the seniority of different tranches in the securitization transaction, the reporting institution should:

(a) divide the EAD of the unrated securitization exposures into covered portion and uncovered portion;

(b) determine the risk-weight of the portion covered by a recognized guarantee or a recognized credit derivative contract in accordance with paragraph 87(a);

(c) determine the risk-weight of the uncovered portion in accordance with paragraph 84;

(d) report the EAD of the securitization exposure before adjusting the CRM effect in the column of “Principal Amount” and report the uncovered portion in the column of “Principal Amount after CRM” in the same row with the risk-weight applicable to the exposure. The EAD of the portion covered by a recognized guarantee or a recognized credit derivative contract is reported in the column of "Principal Amount after CRM" in the row with the risk-weight of the credit protection provider; and

(e) determine the adjusted RWA of the securitization exposure after considering the valuation adjustment and specific provision in accordance with paragraph 61, and report the adjusted RWA in the column of "Adjusted risk-weighted amount".

90. In respect of recognized credit risk mitigation, if the credit protection covers losses partially but not proportionately, the reporting institution should:

(a) determine the covered portion in a descending order of seniority of the different tranches in the securitization transaction and treat any exposures to which the credit protection does not apply as uncovered portion; and

(b) determine the risk-weights of the covered portion and uncovered portion, and the risk-weighted amount in accordance with paragraph 89.

"Fallback option" under supervisory formula for unrated eligible liquidity facility / servicer cash advance facility

91. Under the IRB(S) approach, if a reporting institution demonstrates to the satisfaction of the Monetary Authority that it is not practicable for it to calculate K_{IRB} for the purposes of applying the supervisory formula in respect of any <u>undrawn or drawn portion, as the case may be, of an unrated eligible liquidity facility (or an unrated eligible servicer cash advance facility) (i.e. it is not practicable to determine the risk-weight of the exposure in accordance with section 270(4) of the BCR as set out in section 277(1)(a))</u>, the institution may, with the prior consent of the Monetary Authority, and until the expiration of such period, or the occurrence of such event, as specified in that consent, to calculate the RWA of the exposure in accordance with paragraphs 92 to 95.

92. The RWA of the undrawn portion of an unrated eligible liquidity facility (or an unrated eligible servicer cash advance facility) is arrived at by multiplying the risk-weight determined in accordance with paragraph 93 by the CEA of the undrawn portion (being the undrawn portion multiplied by a CCF of 100%) of the facility, whereas the RWA of the drawn portion of the same facility is arrived at by multiplying the risk-weight determined in accordance with paragraph 93 by the principal amount of the drawn portion.

93. The risk-weight to be allocated to the undrawn or drawn portion of an unrated eligible liquidity facility (or an unrated eligible servicer cash advance facility) is the highest risk-weight assigned under the approach applicable for risk-weighting any of the underlying exposures covered by the facility.

94. The adjusted RWA is calculated by reducing the relevant portion of the RWA of a securitization exposure by an amount equal to the risk-weight of the relevant portion of exposure (determined in accordance with 277(3)(a)) multiplied by the relevant aggregate amount of any valuation adjustment and specific provision made in respect of the relevant portion of exposure.

95. Credit risk mitigation treatment of unrated securitization exposures for which the fallback option is applicable is in general the same as that of the exposures where the supervisory formula method is applicable except for the reference of risk-weight determination should be in accordance with section 277(3)(a) instead of section 270(4) of the BCR. See paragraphs 86 to 90 for details.

96. The following explains the relevant principles for reporting unrated securitization exposures under the items / columns in Division IIIC:

Item	Nature of item
1 – 3	These items are meant to be mutually exclusive.
1(a) to (j)	These items capture securitization exposures (excluding re-securitization exposures) calculated by the Supervisory Formula Method and eligible liquidity facilities or eligible server cash advance facilities calculated by the fallback option. The principles for calculating the relevant amounts are described in paragraphs 59 to 95 above.
2(a) to (i)	These items capture re-securitization exposures calculated by the Supervisory Formula Method and eligible liquidity facilities or eligible server cash advance facilities calculated by the fallback option. The principles for calculating the relevant amounts are described in paragraphs 59 to 95 above.
3	This item captures eligible servicer cash advance facilities that are unconditionally cancellable (by the reporting institution) without prior notice to which a CCF of 0% is applicable.
4(i)	Report the amount of liquidity facilities and servicer cash advance facilities included in item 4.

Column	Nature of column
4 & 8	**Adjusted risk-weighted amount** These columns represent the RWA after valuation adjustment and specific provision in respect of the exposures reported under on-balance sheet exposures or off-balance sheet exposures, as the case may be, in the same row.
9	**Total adjusted risk-weighted amount** This column represents the sum of the adjusted RWAs for all on-balance sheet exposures and off-balance sheet exposures.

97. For the purpose of this return, where a reporting institution uses Supervisory Formula Method or the fallback option under the IRB(S) approach,
    (i) any credit-enhancing interest-only strip recorded by an originating institution in a securitization transaction (after deduction of any gain-on-sale arising from the credit-enhancing interest-only strip);
    (ii) any unrated securitization exposure of the reporting institution if it cannot use the supervisory formula method, or the fallback option for liquidity facilities or servicer cash advance facilities, because it lacks the Monetary Authority's consent to do so; and
    (iii) any unrated securitization exposure of the reporting institution in any case where it is not in compliance, whether in whole or in part, with section 230A in respect of that exposure,

    should be reported under item *(1)(i)* or *(2)(h)*, as the case requires, in this Division.

Section E: Memorandum Items on Liquidity Facilities and Servicer Cash Advance Facilities

Division IV Memorandum Items on Liquidity Facilities and Servicer Cash Advance Facilities under STC(S) Approach and IRB(S) Approach

98. Columns (1) and (2) of item *1* capture the principal amount (**not covered by CRM**) of liquidity facilities and servicer cash advance facilities (i.e. the uncovered portion) that are subject to a risk-weight of 1250% under the STC(S) approach and the IRB(S) approach respectively.

99. Columns (1) and (2) of item *2* capture the principal amount (**before CRM**) of liquidity facilities and servicer cash advance facilities (i.e. the principal amount before taking into account any CRM effect) that are extended to ABCP programmes under the STC(S) approach and the IRB(S) approach respectively.

Section F: Investors' Interest

Division V Investors' Interest for Securitization Exposures of Originating AIs subject to Early Amortization Provision under STC(S) Approach and IRB(S) Approach

100. If the underlying exposures in a securitization transaction that is subject to an early amortization provision are ***revolving*** in nature, the early amortization treatment for the calculation of the RWA of investors' interest specified in section 245 (under the STC(S) approach) or section 257 (under the IRB(S) approach) of the BCR will apply to the originating institution of the transaction unless the conditions set out in section 244(3) or 256(3) of the respective approach are met.

101. An underlying exposure is considered to be revolving in nature if the outstanding balance of the exposure can vary based on the borrower's decision to borrow and repay within a limit established by the lender. Typical examples of such exposures are credit card receivables and corporate loan commitments.

102. Investors' interest consists of the sum of –

(a) the investors' share of the principal amount of the ***drawn balances*** of the underlying exposures; and

(b) the investors' share of the CEA of the ***undrawn balances*** of the underlying exposures as determined by allocating the undrawn balances of the underlying exposures between the originating institution and the investors according to the proportion of their respective share of the drawn balances of the underlying exposures.

103. For the purpose of determining the investors' interest, the CEA of an undrawn balance of an underlying exposure is calculated by multiplying the principal amount of the undrawn balance by the applicable CCF which is specified in:

(a) sections 71 and 73 of the BCR for reporting institutions using the STC approach;

(b) sections 118 and 120 of the BCR for reporting institutions using the BSC approach;

(c) sections 163 and 166 of the BCR for reporting institutions using the foundation IRB approach;

(d) sections 164 and 166 of the BCR for reporting institutions using the advanced IRB approach; or

(e) sections 180 and 182 of the BCR for reporting institutions using the retail IRB approach

Calculation of RWA

104. For originating institutions using the **STC(S) approach**, the **RWA of investors' interest** is calculated by multiplying:

(a) the **investors' interest** as determined in paragraph 102;
(b) the appropriate **CCF** as described in paragraphs 106 to 109; and
(c) the **risk-weight** applicable to the underlying exposures, as if the exposures had not been securitized.

105. For originating institutions using the **IRB(S) approach**, the **RWA of investors' interest** is calculated by multiplying:

(a) the **investors' interest** as determined in paragraph 102;
(b) the appropriate **CCF** as described in paragraphs 106 to 109;
(c) the $\mathbf{K_{IRB}}$, the capital charge factor for the underlying exposures, as described in paragraph 66; and
(d) 12.5.

<u>**Determination of CCF of investors' interest**</u>

106. For the purposes of determining the CCF of the investors' interest in a securitization transaction, the transaction should be classified into one of the following two categories:

(i) transactions that are subject to **controlled** early amortization and (ii) transactions that are subject to **non-controlled** early amortization. These categories are described in paragraph 110.

107. Within each category, the transaction should be further classified into one of the following two categories (i) those with underlying exposures that are ***committed credit lines*** and (ii) those with underlying exposures that are ***uncommitted credit lines***. Committed and uncommitted credit lines are further divided into (i) retail credit lines and (ii) non-retail credit lines. An uncommitted credit line means a credit line provided by the reporting institution to a borrower that is unconditionally cancellable by the institution without prior notice to the borrower. A committed credit line means a credit line which is not an uncommitted credit line.

108. For securitization transactions that are subject to a controlled early amortization provision, the CCF applicable to the investors' interest is 90% if the underlying exposures are committed credit lines or uncommitted non-retail credit lines. For securitization transactions that are subject to a non-controlled early amortization provision, the applicable CCF is 100% if the underlying exposures are committed credit lines or uncommitted non-retail credit lines. In the case of uncommitted retail credit lines (regardless of whether the transactions concerned are subject to a controlled early amortization provision or not), the applicable CCF is determined based on the 3-month average ***excess spread*** level which is expressed as a percentage of the trapping point of the securitization transaction concerned. The applicable CCFs for investors' interest are set out in Schedules 12 and 13 to the BCR (see **Annexes IIId-E & F** for quick reference)**.**

109. If a securitization transaction does not require excess spread to be trapped, the trapping point is deemed to be 4.5%.

110. The following explains the relevant principles for reporting investors' interest in Division V:

Item	Nature of item
Col. (1) to (5)	**Controlled early amortization**

A securitization transaction is considered as being subject to a **controlled** early amortization provision if all of the following conditions are met:

(a) the originating institution must have a plan to ensure that it has sufficient capital and liquidity available in the event of an early amortization;

(b) throughout the duration of the transaction, including the early amortization period, the same pro-rata sharing between the originating institution and investors of payments of interest, principal, expenses, losses and recoveries is applied, based on the relative share of the originating institution and the investors in the drawn balances of the underlying exposures outstanding at the beginning of each month;

(c) the early amortization period set by the originating institution is sufficient for at least 90% of the total debt outstanding under the underlying exposures at the beginning of that period to have been repaid, or to have been recognized as in default, by the end of that period; and

(d) the speed of repayment should not be more rapid than would be allowed by a straight-line amortization over the period referred to in paragraph (c).

In the case of reporting institutions using the STC(S) approach, the amounts reported in column (4) and column (5) should be the same.

Col. (6) to (10) **Non- controlled early amortization**

A securitization transaction is considered as being subject to a **non-controlled** early amortization provision if one or more of the conditions mentioned above are not satisfied.

In the case of reporting institutions using the STC(S) approach, the amounts reported in column (9) and column (10) should be the same.

Hong Kong Monetary Authority
June 2013

Annex IIId-A

MAPPING OF ECAI ISSUE SPECIFIC RATINGS INTO CREDIT QUALITY GRADES UNDER STC(S) APPROACH

LONG-TERM CREDIT QUALITY GRADE (LTCQG)

LTCQG	Standard & Poor's Ratings Services	Moody's Investors Service	Fitch Ratings	Rating and Investment Information, Inc.	Japan Credit Rating Agency Limited
1	AAA AA+ AA AA-	Aaa Aa1 Aa2 Aa3	AAA AA+ AA AA-	AAA AA+ AA AA-	AAA AA+ AA AA-
2	A+ A A-	A1 A2 A3	A+ A A-	A+ A A-	A+ A A-
3	BBB+ BBB BBB-	Baa1 Baa2 Baa3	BBB+ BBB BBB-	BBB+ BBB BBB-	BBB+ BBB BBB-
4	BB+ BB BB-	Ba1 Ba2 Ba3	BB+ BB BB-	BB+ BB BB-	BB+ BB BB-
5	B+ B B- CCC+ CCC CCC- CC C D	B1 B2 B3 Caa1 Caa2 Caa3 Ca C	B+ B B- CCC CC C D	B+ B B- CCC+ CCC CCC- CC C	B+ B B- CCC CC C D

SHORT-TERM CREDIT QUALITY GRADE (STCQG)

STCQG	Standard & Poor's Ratings Services	Moody's Investors Service	Fitch Ratings	Rating and Investment Information, Inc.	Japan Credit Rating Agency Limited
1	A-1+ A-1	P-1	F1+ F1	a-1+ a-1	J-1+ J-1
2	A-2	P-2	F2	a-2	J-2
3	A-3	P-3	F3	a-3	J-3
4	B B-1 B-2 B-3 C D	NP	B C D	b c	NJ D

Annex IIId-B

Application of External Credit Assessments for Risk-weighting Securitization Exposures

(A) Nomination of ECAIs

1. The reporting institution may nominate one or more ECAI(s) the credit assessment ratings of which will be used for the purposes of deriving risk-weights for securitization exposures.

2. The ECAI(s) nominated should (taken collectively if more than one ECAI is nominated) issue a range of credit assessment ratings which provides a reasonable coverage to the counterparties and the geographical regions in relation to the securitization exposures.

3. The reporting institution should use the ratings of the nominated ECAI(s) within a given type of securitization exposures consistently.

4. The reporting institution should not, in respect of the same securitization transaction, use ECAI issue specific ratings issued by an ECAI for one or more than one securitization position and use the ECAI issue specific ratings issued by another ECAI for other securitization positions that may or may not be rated by the first-mentioned ECAI.

(B) Use of External Credit Assessments

I. Securitization exposures regarded as unrated

5. The reporting institution should regard any securitization exposure as unrated if it does not have an ECAI issue specific rating assigned to it by any of the institution's nominated ECAI(s).

II. Multiple assessments

6. If a securitization exposure has only one ECAI issue specific rating, that rating should be used to determine the risk-weight of that exposure.

7. If there are two or more ECAI issue specific ratings assigned to a securitization exposure that would map to different risk-weights, any one of those ratings may be used to determine the risk-weight of that exposure except the one or more of those ratings that would map to the lowest of those different risk-weights.

III. Inferred ratings (only applicable to institutions using IRB(S) Approach)

8. The reporting institution may determine the risk-weight of a securitization exposure held by it with no ECAI issue specific rating based on the ECAI issue

specific rating(s) of a reference securitization exposure (which may or may not be one held by the institution).

9. The reference securitization exposure should satisfy the following requirements:

- the reference securitization exposure should be subordinated in all respects to the securitization exposure held by the institution with no ECAI issue specific rating after taking into account credit enhancements, if any, when assessing the relative subordination of the exposure and the reference securitization exposure,

- the maturity of the reference securitization exposure is not less than that of the exposure; and

- the inferred rating is updated from time to time in order to reflect any changes in the ECAI issue specific rating of the reference securitization exposure.

10. The reporting institution should follow the principles set out in paragraph 7 to determine the appropriate risk-weight to be applied to the concerned exposure if there are two or more ECAI issue specific ratings assigned by two or more different ECAIs to the reference securitization exposure that would map to two or more different risk-weights.

IV. Others

11. In order to avoid any double counting of credit enhancement factors, no CRM techniques will be recognized if the credit enhancement is already reflected in the issue specific rating.

Illustrative Examples on Calculating the Capital Requirements of Overlapped Banking Book Exposures

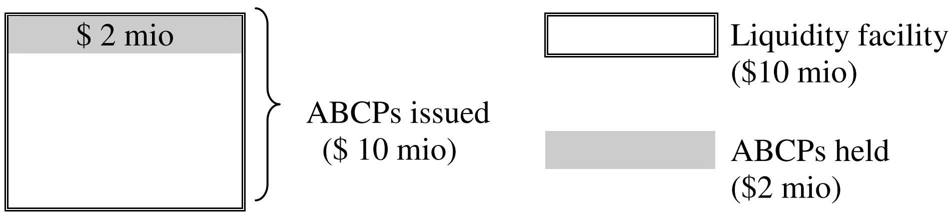
Applicable to originating institution using the STC(S) approach

Case 1: With overlap

1. An originating institution of an ABCP programme provides a liquidity facility of US$10 million to cover 100% of the ABCPs issued under the programme. The institution also holds 20% or US$2 million of the ABCPs issued. Details of the exposures are given below:

   - The highest risk-weight that would be applied to the underlying exposures of the ABCPs is 50%;
   - The CCF applicable to the liquidity facility is 50%;
   - The ABCPs held by the institution have an ECAI issue specific rating that maps to a risk-weight of 20%.

2. The overlapping portion is determined as follows:



   = 10 million + 2 million – 10 million
   = 2 million

3. If the overlapping portion is attributed to the liquidity facility, the risk-weighted amount (RWA) of the overlapping portion would be

   = 2 million × CCF × risk-weight applicable to the facility
   = 2 million × 50% × 50%
   = 0.5 million

4. If the overlapping portion is attributed to the ABCPs held, the RWA of the overlapping portion would be

   = 2 million × risk-weight applicable to the ABCPs
   = 2 million × 20%
   = 0.4 million

5. Since the RWA resulted from the calculation shown in paragraph 3 is larger, the overlapping portion should be attributed to the liquidity facility. It follows that the total RWA of the two exposures should be determined as follows:

RWA of liquidity facility
= 10 million $\times$ CCF $\times$ risk-weight applicable to the facility
= 10 million $\times$ 50% $\times$ 50%
= 2.5 million

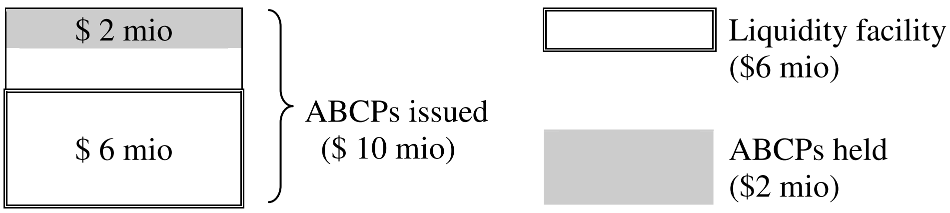
RWA of ABCPs held by the originating institution
= 0

Total RWA = 2.5 million + 0 = 2.5 million

Case 2: Without overlap

6. An originating institution of an ABCP programme provides a liquidity facility of US$6 million to cover 60% of the ABCPs issued under the programme. The institution also holds 20% or US$2 million of the ABCPs issued. Other details of the exposures are the same as those in Case 1.

7. There is no overlap between the liquidity facility and the ABCPs held by the institution.



8. The total RWA of the two exposures should be determined as follows:

RWA of liquidity facility
= 6 million $\times$ CCF $\times$ risk-weight applicable to the facility
= 6 million $\times$ 50% $\times$ 50%
= 1.5 million

RWA of ABCPs held by the originating institution
= 2 million $\times$ risk-weight applicable to the ABCPs
= 2 million $\times$ 20%
= 0.4 million

Total RWA = 1.5 million + 0.4 million = 1.9 million

Applicable to originating institution using the IRB(S) approach

9. The treatment of overlapping facilities and exposures booked in the banking book is the same as that of the STC(S) approach as shown in the above illustration except that an originating institution shall apply the applicable risk-weight and CCF to the liquidity facility and the ABCPs held based on the ratings-based method or the supervisory formula method, as the case may be, in determining the RWA of the relevant exposures.

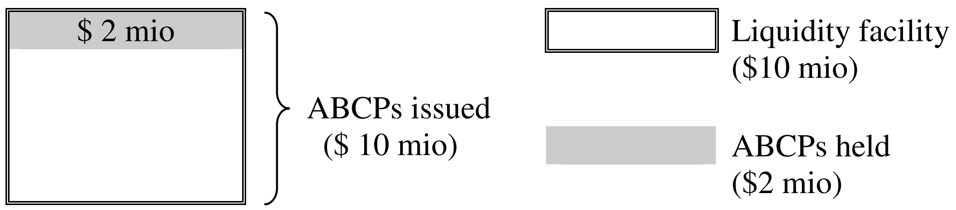
Illustrative Examples on Calculating the Capital Requirements of Overlaps between Banking Book and Trading Book Exposures

Applicable to originating institution using the STC(S) approach and the STM approach

1. An originating institution of an ABCP programme provides a liquidity facility of US$10 million to cover 100% of the ABCPs issued under the programme. The institution also holds 20% or US$2 million of the ABCPs issued for trading purposes. Details of the exposures are given below:

    - The highest risk-weight that would be applied to the underlying exposures of the ABCPs is 50%;
    - The CCF applicable to the liquidity facility is 50%;
    - The ABCPs held by the institution have an ECAI issue specific rating that maps to a market risk capital charge factor for specific risk of 1.60% under the STM approach.

2. The overlapping portion is determined as follows:



$= 10$ million $+ 2$ million $- 10$ million
$= 2$ million

3. If the overlapping portion is attributed to the liquidity facility, the risk-weighted amount (RWA) of the overlapping portion would be

$= 2$ million $\times$ CCF $\times$ risk-weight applicable to the facility
$= 2$ million $\times 50\% \times 50\%$
$= 0.5$ million

4. If the overlapping portion is attributed to the ABCPs held, the RWA of the overlapping portion would be

$= 2$ million $\times$ capital charge factor applicable to the ABCPs
$= 2$ million $\times 1.6\% \times 12.5$
$= 0.4$ million

5. Since the RWA resulted from the calculation shown in paragraph 3 is larger, the overlapping portion should be attributed to the liquidity facility. It follows that the RWA of the two exposures should be determined as follows:

RWA of liquidity facility
= 10 million $\times$ CCF $\times$ risk-weight applicable to the facility
= 10 million $\times$ 50% $\times$ 50%
= 2.5 million

RWA for specific risk of the ABCPs held by the originating institution
= 0

Applicable to originating institution using the IRB(S) approach and the STM approach

6. The treatment of overlapping facilities (booked in the banking book) and exposures (booked in the trading book) is the same as that of the STC(S) approach as shown in the above illustration except that an originating institution shall apply the applicable risk-weight and CCF to the liquidity facility based on the ratings-based method or the supervisory formula method, as the case may be, and the applicable risk-weight to the ABCPs held based on the applicable market risk approach (the STM approach in the above illustration) in determining the RWA of the relevant exposures.

Annex IIId-C

MAPPING OF ECAI ISSUE SPECIFIC RATINGS INTO CREDIT QUALITY GRADES UNDER RATINGS-BASED METHOD

TABLE A
(Securitization exposures excluding re-securitization exposures)

LONG-TERM CREDIT QUALITY GRADE

Long-term credit quality grade (LTCQG)	Risk-weight			Standard & Poor's Ratings Services	Moody's Investors Service	Fitch Ratings	Rating and Investment Information, Inc.	Japan Credit Rating Agency Limited
	A	B	C					
1	7%	12%	20%	AAA AA+	Aaa Aa1	AAA AA+	AAA AA+	AAA AA+
2	8%	15%	25%	AA AA-	Aa2 Aa3	AA AA-	AA AA-	AA AA-
3	10%	18%	35%	A+	A1	A+	A+	A+
4	12%	20%	35%	A	A2	A	A	A
5	20%	35%	35%	A-	A3	A-	A-	A-
6	35%	50%	50%	BBB+	Baa1	BBB+	BBB+	BBB+
7	60%	75%	75%	BBB	Baa2	BBB	BBB	BBB
8		100%		BBB-	Baa3	BBB-	BBB-	BBB-
9		250%		BB+	Ba1	BB+	BB+	BB+
10		425%		BB	Ba2	BB	BB	BB
11		650%		BB-	Ba3	BB-	BB-	BB-
12		1250%		B+ B B- CCC+ CCC CCC- CC C D	B1 B2 B3 Caa1 Caa2 Caa3 Ca C	B+ B B- CCC CC C D	B+ B B- CCC+ CCC CCC- CC C	B+ B B- CCC CC C D

TABLE B

(Securitization exposures excluding re-securitization exposures)

SHORT-TERM CREDIT QUALITY GRADE

Short-term credit quality grade (STCQG)	Risk-weight A	Risk-weight B	Risk-weight C	Standard & Poor's Ratings Services	Moody's Investors Service	Fitch Ratings	Rating and Investment Information, Inc.	Japan Credit Rating Agency Limited
1	7%	12%	20%	A-1+ A-1	P-1	F1+ F1	a-1+ a-1	J-1+ J-1
2	12%	20%	35%	A-2	P-2	F2	a-2	J-2
3	60%	75%	75%	A-3	P-3	F3	a-3	J-3
4		1250%		B B-1 B-2 B-3 C D	NP	B C D	b c	NJ D

For Tables A and B,

- risk-weights specified in column A denote risk-weights for senior securitization positions where the effective number of the underlying exposures of each position is not less than 6;
- risk-weights specified in column B denote risk-weights for securitization positions that are not senior securitization positions where the effective number of the underlying exposures of each position is not less than 6;
- risk-weights specified in column C denote risk-weights for securitization positions where the effective number of the underlying exposures of each position is less than 6, whether or not the position is a senior securitization position; and
- if a liquidity facility is regarded as a securitization exposure other than re-securitization exposure, the use of risk-weights in column A is subject to the following additional conditions being satisfied:
    - (i) the facilities cover all of the outstanding debts (including debts that are senior) supported by the pool of underlying exposures in the securitization transactions concerned; and
    - (ii) repayment of the facilities has seniority over the outstanding debts referred to in item (i).

TABLE C

LONG-TERM CREDIT QUALITY GRADE
(Re-securitization exposures)

Long-term credit quality grade (LTCQG)	Risk-weight A	Risk-weight B	Standard & Poor's Ratings Services	Moody's Investors Service	Fitch Ratings	Rating and Investment Information, Inc.	Japan Credit Rating Agency Limited
1	20%	30%	AAA AA+	Aaa Aa1	AAA AA+	AAA AA+	AAA AA+
2	25%	40%	AA AA-	Aa2 Aa3	AA AA-	AA AA-	AA AA-
3	35%	50%	A+	A1	A+	A+	A+
4	40%	65%	A	A2	A	A	A
5	60%	100%	A-	A3	A-	A-	A-
6	100%	150%	BBB+	Baa1	BBB+	BBB+	BBB+
7	150%	225%	BBB	Baa2	BBB	BBB	BBB
8	200%	350%	BBB-	Baa3	BBB-	BBB-	BBB-
9	300%	500%	BB+	Ba1	BB+	BB+	BB+
10	500%	650%	BB	Ba2	BB	BB	BB
11	750%	850%	BB-	Ba3	BB-	BB-	BB-
12	1250%		B+ B B- CCC+ CCC CCC- CC C D	B1 B2 B3 Caa1 Caa2 Caa3 Ca C	B+ B B- CCC CC C D	B+ B B- CCC+ CCC CCC- CC C	B+ B B- CCC CC C D

TABLE D

SHORT-TERM CREDIT QUALITY GRADE
(Re-securitization exposures)

Short-term credit quality grade (STCQG)	Risk-weight A	Risk-weight B	Standard & Poor's Ratings Services	Moody's Investors Service	Fitch Ratings	Rating and Investment Information, Inc.	Japan Credit Rating Agency Limited
1	20%	30%	A-1+ A-1	P-1	F1+ F1	a-1+ a-1	J-1+ J-1
2	40%	65%	A-2	P-2	F2	a-2	J-2
3	150%	225%	A-3	P-3	F3	a-3	J-3
4	1250%		B B-1 B-2 B-3 C D	NP	B C D	b c	NJ D

For Tables C and D,

- risk-weights specified in column A denote risk-weights applicable to re-securitization exposures (other than liquidity facilities) that are senior positions as referred to in s262(2) of the BCR and where none of the underlying exposures of the re-securitization exposures are re-securitization exposures.
- if a liquidity facility is regarded as a re-securitization exposure, the use of risk-weights in column A is subject to the following additional conditions being satisfied:
  - (i) the facilities cover all of the outstanding debts (including debts that are senior) supported by the pool of underlying exposures in the securitization transactions concerned; and
  - (ii) repayment of the facilities has seniority over the outstanding debts referred to in item (i).

Annex IIId-D

Illustrative Examples on Calculating the Effect of Credit Risk Mitigation under Supervisory Formula Method

1. Illustrative example involving collateral — proportional cover

Assume an originating institution purchases a $100 securitization exposure with a credit enhancement level in excess of K_{IRB} level for which an external or inferred rating is not available. Additionally, assume that the capital charge calculated by the use of supervisory formula method (the SF capital charge) on the securitization exposure is $1.6 (when multiplied by 12.5 results in a risk-weighted amount of $20).

Further assume that the originating institution has received $80 of collateral on the securitization exposure in the form of cash that is denominated in the same currency as the securitization exposure. The capital charge for the exposure after adjusting for the effect of the collateral is determined by multiplying the SF capital charge by the ratio of adjusted exposure amount to the original exposure amount, as illustrated below.

Step 1:

Adjusted exposure amount (E*)

E* = max {0, [E x (1 + He) - C x (1 - Hc - Hfx)]}

   = max {0, [100 x (1 + 0) - 80 x (1 - 0 - 0)]} = $20

Where,

E* = exposure value after credit risk mitigation ($20)

E = exposure value before credit risk mitigation ($100)

He = haircut appropriate to the exposure (this haircut is not relevant because the originating institution is not lending the securitization exposure in exchange for collateral, thus zero value is assigned)

C = current value of the collateral received ($80)

Hc = haircut appropriate to the volatility of collateral ($0)

Hfx = haircut appropriate for the ***currency mismatch*** between the collateral and the exposure ($0)

Step 2:

Capital charge = (E* / E) x SF capital charge

Capital charge = $20 / $100 x $1.6 = $0.32

2. Illustrative example involving a recognized guarantee — proportional cover

All of the assumptions provided in the illustrative example involving collateral apply except the form of credit risk mitigant. Assume that the originating institution has received an eligible, unsecured guarantee in the amount of $80 from another authorized institution. Therefore, a haircut for currency mismatch will not apply. The capital charge is determined as follows:

(a) The covered portion of the securitization exposure ($80) is to receive the risk-weight of the credit protection provider. The risk-weight for the protection provider is equivalent to that for an unsecured loan to the guarantor, as determined under the IRB approach. Assume that this risk-weight is 10%. Then, the capital charge for the covered portion will be: $80 x 10% x 8%= $0.64.

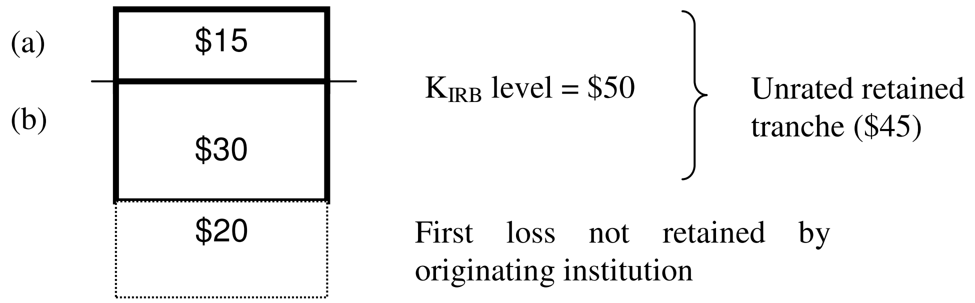
(b) The capital charge for the uncovered portion ($20) is derived by multiplying the capital charge for the securitization exposure by the share of the uncovered portion to the exposure amount. The share of the uncovered portion is: $20 / $100 = 20%. Thus, the capital charge will be: $1.6 x 20% = $0.32.

Total capital charge for the covered and uncovered portions
= $0.64 (covered portion) + $0.32 (uncovered portion) = $0.96

3. Illustrative example — the case of credit risk mitigants covering the most senior parts

Assume that an originating institution securitizes a pool of loans of $1000. The K_{IRB} of this pool of underlying exposures is 5% (capital charge of $50). There is a first loss tranche of $20. The originating institution retains only the second most junior tranche: an unrated tranche of $45.

The situation is summarized as follows:



(A) <u>Capital charge without collateral or guarantee</u>

According to this example, the capital charge for the unrated retained tranche that is straddling the K_{IRB} level is the sum of the capital charges of tranches (a) and (b) in the graph above:

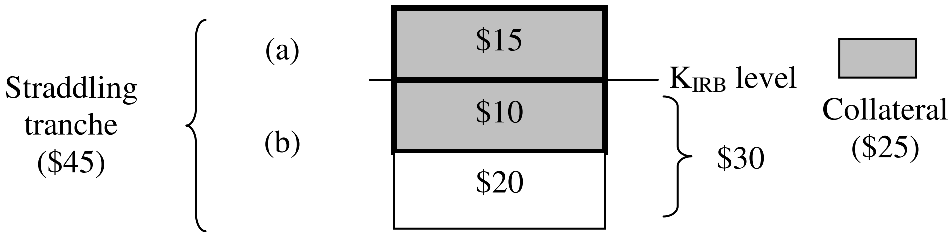
(a) Assume the effective risk-weight calculated under the supervisory formula method for this subtranche is 820%. Thus, the risk-weighted amount is: \$15 x 820% = \$123. The capital charge is: \$123 x 8% = \$9.84.

(b) The subtranche below K_{IRB} level should be deducted. The risk-weighted amount is: \$30 x1250% = \$375. The capital charge is: \$375 x 8% = \$30.

Total capital charge of the unrated straddling tranche
= \$9.84 + \$30 = \$39.84

(B) <u>Capital charge with collateral</u>

Assume now that the originating institution has received \$25 of collateral in the form of cash that is denominated in the same currency as the securitization exposure. Because the tranche is straddling the K_{IRB} level, we should assume that the collateral is covering the most senior subtranche above K_{IRB} level (i.e. subtranche (a) covered by \$15 of collateral) and, only if there is some collateral left, the coverage should be applied to the subtranche below K_{IRB} level beginning with the most senior portion (e.g. subtranche (b) covered by \$10 of collateral). Thus, we have:



The capital charge for the position is determined by multiplying the SF capital charge by the ratio of adjusted exposure amount to the original exposure amount, as illustrated below. It should be applied for the two subtranches.

(a) The **first subtranche** has **an initial exposure of \$15** and collateral of \$15, so in this case it is completely covered. In other words:

Step 1:
Adjusted exposure amount
E* = max {0, [E x (1 + He) - C x (1 - Hc - Hfx)]}
= max {0, [15 - 15]} = \$0
Where:
E* = exposure value after credit risk mitigation (\$0)
E = exposure value before credit risk mitigation (\$15)
C = current value of the collateral received (\$15)
He = haircut appropriate to the exposure (not relevant here, thus a zero value is assigned)

Hc	=	haircut appropriate to the volatility of collateral ($0)
Hfx	=	haircut appropriate to the currency mismatch of the collateral and the exposure ($0)

Step 2:
Capital charge = (E* / E) x SF capital charge
Capital charge = 0 x $9.84 = $0

(b) The **second subtranche** has an **initial exposure of $30** and collateral of $10, which is the amount left after covering the subtranche above K_{IRB} level. Thus, the $10 should be allocated to the most senior portion of the $30 subtranche.

Step 1:
Adjusted exposure amount
E* = max {0, [30 x (1 + 0) - 10 x (1 - 0 - 0)]} = $20

Step 2:
Capital charge = (E* / E) x SF capital charge
Capital charge = $20/$30 x $30 = $20

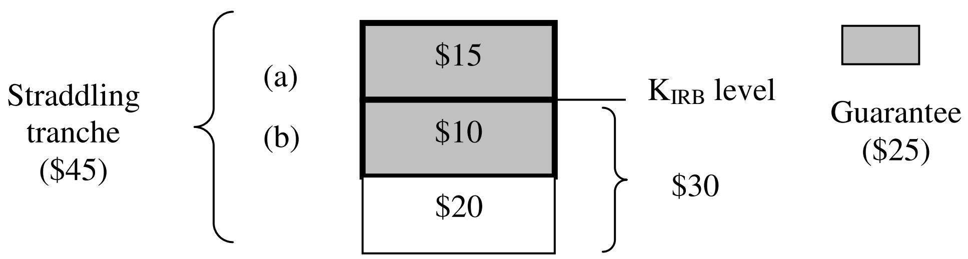
Finally, total capital charge of the unrated straddling tranche

= $0 + $20 = $20

(C) <u>Capital charge with guarantee</u>

Assume now that instead of collateral, the reporting institution has received an eligible, unsecured guarantee in the amount of $25 from another authorized institution (the guarantor). Therefore the haircut for currency mismatch will not apply.

The situation can be summarised as:



The capital charge of the two subtranches is determined as follows:

(a) The first subtranche has an initial exposure of $15 and a guarantee of $15, so in this case it is completely covered. The $15 will receive the risk-weight of the credit protection provider. The risk-weight of the credit protection provider is equivalent to that for an unsecured loan to the guarantor, as determined under the IRB approach. Assume that this risk-weight is 20%, the capital charge for the covered portion is: \$15 x 20% x 8%= \$0.24.

(b) The second subtranche has an initial exposure of \$30 and a guarantee of \$10 should be applied to the most senior portion of this subtranche. Accordingly, the covered portion is \$10 and the uncovered portion is \$20. Again, the covered portion of the securitization exposure is to receive the risk-weight of the guarantor. The capital charge for the covered portion is: \$10 x 20% x 8%= \$0.16. The capital charge for the uncovered portion (for an unrated position below K_{IRB} level) is \$20 x 1250% x 8%= \$20.

Total capital charge for the unrated straddling tranche
= \$0.24 (covered portion, above K_{IRB} level) + \$0.16 (covered portion, below K_{IRB} level) + \$20 (uncovered portion, below K_{IRB} level) = \$20.4

Annex IIId-E

CCF for Securitization Exposures Subject to Controlled Early Amortization Provision

Credit line	Uncommitted		Committed
	3-month average excess spread level	CCF	CCF
Retail	133.33% or more of trapping point	0%	90%
	less than 133.33% to 100% of trapping point	1%	
	less than 100% to 75% of trapping point	2%	
	less than 75% to 50% of trapping point	10%	
	less than 50% to 25% of trapping point	20%	
	less than 25% of trapping point	40%	
Non-retail	not applicable	90%	90%

Annex IIId-F

CCF for Securitization Exposures Subject to Non-controlled Early Amortization Provision

Credit line	Uncommitted		Committed
	3-month average excess spread level	CCF	CCF
Retail	133.33% or more of trapping point	0%	100%
	less than 133.33% to 100% of trapping point	5%	
	less than 100% to 75% of trapping point	15%	
	less than 75% to 50% of trapping point	50%	
	less than 50% of trapping point	100%	
Non-retail	not applicable	100%	100%